Journal of Education.

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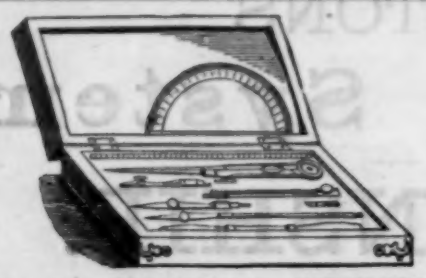

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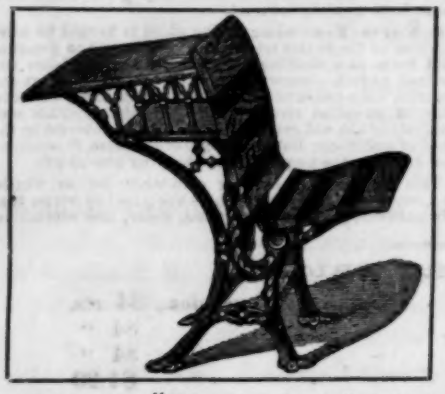

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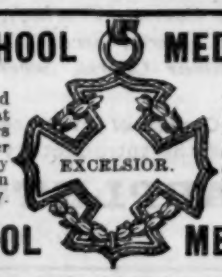

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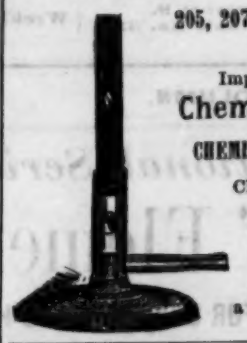

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OMNES SUPPLICAMUS. — *SEPT.*, 1881.

BY H. F. BARNES.

A nation waits, a nation weeps,
A nation pleads with Him who keeps
Our vital breath,—
O stay the throbbing pangs of pain,
Refresh the weary, clouded brain,
Bring back our wounded Chief again
From threatening Death!

Remember all his noble deeds,
His timely words to meet our needs
Through anxious years.
What righteous cause defence has sought,
In fields of action or of thought,
And with the foremost found him not?
Regard our tears!

Behold how severed States unite,
How bitter factions cease to fight,
For him to pray!
May not his sufferings be the band,
To bind once more in love our land,
Beneath Thy mighty, guiding hand?
Do not say, Nay!

With mother, wife, and children dear,
Rulers and peoples, far and near,
We've common cause,
That He who once bent o'er man's bed,
And to the living raised the dead,
Will spare that home and Nation's Head!
Shall Mercy pause?

Winchester, Mass. —*Boston Journal.*

PUBLIC OPINION.

OUR "OLYMPIC GAMES."—Governor Long of Massachusetts, at the opening of the Institute Fair, said:

"These are our olympic games; but the races we run are of the head, and not of the feet; the wrestling matches are not of the human sinews, but of the forces of nature, grappling, under the direction of human skill, with the fibers of the field, with the inertia of ores, with wood and stone,—not to fling them to the earth, but to raise and train them into a million handservants of usefulness and luxury; and the prize is not a fading olive-wreath, but that perfection of blessings, that dream of all other lands and lots, — a New-England home."

PHONETIC SPELLING IN AMERICA.— Phonetic spelling seems to make more progress in the United States than in this country (England). The report of the index Society makes very laudatory mention of the indices compiled by an American gentlemen, who styles himself "Q. P.," and of whom we read that he has prepared "An Index to Articles on History, Biografy, Travel, Filosofy, Literature, and Politics."—*Globe.*

THE PERKINS INSTITUTE FOR THE BLIND. — Both as the aim of personal interest founded on personal observation, and as representing the commonwealth, which is a generous contributor to the Perkins Institution for the Blind, I am happy to take part in the appeal which it now makes for aid. Associated as it is with the name of Howe, a resort as it is for the sympathies of Andrew, one of the few things in America that won the admiration of the youthful Dickens, forever illustrated by the story of Laura Bridgman, I know the hold it has upon the hearts of the people of Massachusetts. Still more would it touch your hearts, if in the institution itself you could see the intelligence and interest, the large and faithful lines of its beneficence; if you could hear its pupils discuss anatomy, and dissect and put together the parts of the model of the human framework; *if you could listen to their clear statements of the processes of natural philosophy, illustrated by experiments as intelligently performed as by one having sight, and expressed with a clearness of language that no slave of the mere letter can equal."* — *Gov. Long, Mass.*

ENGLISH IN THE GERMAN ARMY. — The German Government have announced that, commencing from February, 1883, English will be a compulsory subject of examination for the entrance of officers into the army. Candidates coming from gymnasia, however, will have the option of offering Greek. The program of the examination in English is as follows: Reading of English at sight; translation of English into German, and of German into English; English syntax; and the grammar and etymological analysis of English phrase.

THE BORN EDUCATOR. — Rev. Francis Tiffany illustrates his idea of the born-educator as follows: "In Mr. Darwin's *Origin of Species*, unless memory plays a trick with me, a curious story is told about a man who was in the habit of going to the Zoölogical Gardens in Regent's Park, London, to buy young monkeys for subsequent training. The price of them was a guinea apiece. One day, however, he said to the keeper, 'If you will let me take five or six of them home with me to try, I will give you two guineas for the one I decide to keep.' 'Why, how is that?' was the answer: 'do you find such a difference in them?' 'Oh, immense,' replied the man. 'When I begin to train them, if I come across a monkey whose attention is flying round every-which-way, his mind off the lesson every time a fly buzzes or a boy whistles, I know I shall never bring him to much. But, when I get hold of one that is seriously inclined, you know,—concentrating his mind right down on the subject, and not allowing himself to be diverted by any outside trifles, I have no end of expectation as to what he may amount to." Now, there was a man who was a born-educator. Without any of the advantages you young graduates have enjoyed in this normal school, he could, nevertheless, I humbly suspect, give any one of you a few points. He had effectually mastered the first of all requirements in a common-sense teacher, the clear understanding that neither God nor man can make something out of nothing.

ILLITERATE VOTERS. — It makes little difference whether the head be covered with hair or wool. An illiterate white man is an unsafe repository for the right of suffrage. There are 304,000 white and 814,000 colored illiterate voters in the South. The education of the voter is the greatest question of the age, overriding all questions of tariff and railroads, and all questions save civil-service reform, of which it is an important element.—*Dr. Curry, Agt. Peabody Fund.*

TOO MUCH POLITICS.—The main reason why teaching is outranked by the other professions is that the tenure of office is so uncertain and insecure. Our teachers are too often appointed by personal favoritism or influence, too often retained in their positions long after their inability or uselessness is apparent, and too often ousted from their places to make room for the friends of prominent politicians. In other words, there is to much politics in our public-school system.— *Prov. Press.*

BOOKS FOR THE BLIND.—The book printed in raised letters is the main window through which the blind can look out upon the great world of wit and wisdom, poetry and science. I had occasion to visit Harvard College, and saw 250,000 books in the library, and could not help comparing it with the library of the school for the blind, where only 100 volumes were on the shelves, half of which were printed at the institution. The blind do not complain that they have so few books, but request that their library may be enlarged. — *Rev. Phillips Brooks, D.D.*

MINNESOTA'S NEEDS.— Professor Reynolds enumerates some of the wants of Minnesota as follows: "A State journal is needed to disseminate educational news. The greatest want is a corps of earnest, devoted, and thoroughly educated teachers. Our institutes should enlarge their spheres of operations and be more thoroughly organized and unified, and made to reach every county, and if possible every teacher in the State. Our system of supervision is largely defective; improvment in our schools will be in direct ratio with the improvement in supervision. Our university needs our forstering care, and the other institutions of learning in the State need words of cheer and encouragement."

"THE NICK OF TIME."

BY WM. M. THAYER.

A teacher of twenty years' experience remarked to another teacher, "There is nothing like saying things to pupils in the nick of time." He was speaking of advice as well as of the improvement of passing events. For example, when Vice-President Wilson died, this teacher inproved the occasion by discoursing upon the industry, perseverance, self-reliance, noble purpose, and moral principle which lifted him from obscurity to the second office within the gift of the American people. By thus employing this grand illustration of self-help and success in life, when the hearts of his pupils were touched by the news of Mr. Wilson's death, he made a deeper impression upon their minds, and his lessons were more enduring. That was what he meant by "saying things in the nick of time."

Now is the "nick of time" for the teachers to inspire a high purpose in the hearts of their pupils, by incidents from the life of President Garfield. The theme is a fruitful one; and every scholar eagerly seeks favorable news from his bed of suffering. They will readily catch and hold whatever is rehearsed of his early struggles, his poverty, energy, lofty aims, studious habits, reading, filial love, and force of character. Notice several points that may be made a source of inspiration: His advance from a log-cabin to the White House, before he was fifty years of age, shows the possibilities to American youth. Born in the wilderness, away from the agencies of civilization, substantially without books and teachers in his boyhood, yet advancing, by dint of perseverance and manly aim, through the lower to the higher grades of culture; until he is known throughout the land as a scholar, general, statesman, and honored ruler. All boys cannot be president, but all need those elements of character that he possessed, in order to become successful in whatever vocation they may engage. A shiftless, aimless boy will not grow into stalwart manhood, meriting success in any calling. He must be industrious and persevering, and possess snap, tact, and principle to make a truly successful farmer, mechanic, merchant, teacher, physician, lawyer, or clergyman.

Girls, too, may receive their share of advice from the same illustration; for the qualities enumerated are absolutely necessary to make them efficient teachers, clerks, correspondents, authors, or housekeepers. About the most cumbersome and useless article that can be set up in an American home, is an inefficient, lazy, dawdling "mistress of ceremonies." Mrs. Garfield, in the presidential mansion, preparing the food allowed her stricken husband, shames all such apologies for womanhood. She was educated upon the plan of developing the powers of her three-fold nature thoroughly, so that she can serve in the kitchen or reception-room of the White House with equal success. Educate girls for the parlor alone, or to shine in the realms of fashion, wealth, or distinction, instead of training their faculties so as to qualify them for any position to which Providence may assign them, and they are not fitted to occupy any position creditably. Mrs. Garfield wrote to her husband from her kitchen, when he was busily employed in the great public affairs of the nation: "I am so glad to tell you that out of the toil and disappointment of the summer just ended, I have risen up to a victory; that the silence of thought since you have been away has won for my spirit a triumph. I read something like this the other day: 'There is no healthy thought without labor, and that makes the laborer happy.' Perhaps this is the way I have been able to climb up higher. It came to me one morning when I was making bread. I said to myself: 'Here I am, compelled by an inevitable necessity to make our bread this summer. Why not consider it a pleasant occupation, and make it so by trying to see what perfect bread I can make?' It seemed like an inspiration, and the whole of life grew brighter." Elements of character appear in these few words, such as make a woman successful anywhere,—either as the wife of a farmer or president. Precisely as it is with her husband, who made the best he could of the log-cabin, as he is now making the best of the White House, and went singing his way along in early life, whether plowing in the field, shoving a carpenter's jack-plane, making potash, cutting wood, running a canal-boat, or snatching odd moments for study. Men and women *par excellence* are made of such material.

Again, President Garfield did everything *well*, as if he believed that "whatever is worth doing at all is worth doing well." *Thoroughness* was a principle with him. He did farm-work so well, at eighteen years of age, as to elicit the commendation of neighbors. He planed boards so well for the carpenter, at twelve, that praise and other jobs followed. He served the "black-salter" so well, at fifteen, that he was offered much larger pay to remain. He was so efficient on the canal-boat, at sixteen, that he secured early promotion, and the verdict of the captain, "the best hand on board." He was so thorough in his studies, that his teacher held him up as a model scholar. His excellence in teaching was so high that, in two years, he rose to the head of the institution. He was so efficient as a State senator, that his services were required in organizing regiments for the war. His thoroughness as a colonel in the army made him brigadier; and then major-general; then United States representative; then United States senator; then president before he had time to act as senator. There are telling incidents on each one of these points, in his life, the rehearsal of which will enthuse the hearts of the dullest pupils; and they show that "doing things well" is an important element of success.

Another fact: *he stuck to his purpose.* He was not whiffling about from one thing to another. He did not go off in a spurt to-day, and drizzle out his energies to-morrow. What Benton used to call "stick-to-it-iveness" he cultivated to perfection. True, until his student days began, he labored in different employments, because labor was not easily obtained at that time, and in that sparsely-populated section of the country. He wanted to know something, and he stuck to it until he did. He worked before school and after school, and on Saturdays when school didn't keep; and boarded himself and did his own mending, to pay his school-bills. He wore poor clothes, and denied himself games of quoits and ball and excursions, that he might make more rapid progress and keep out of debt. His perseverance knew no bounds, and acknowledged no "insurmountable obstacles." His life abounds in incidents that illustrate this remarkable characteristic, to which both boys and girls will listen with enthusiastic delight; and remember what they hear, too.

Once more, his life furnishes incidents on the subject of reading,—good and bad books. A few weeks acquaintance with sensational literature, at fifteen, when away from home, well-nigh upset the noble plans and aims of his previous life. At the "black-salter's" he found "Marryatt's Novels," "The Pirate's Own Book," "Jack Halyard," "Bucchaneers of the Carribean Seas," etc., and he read them with avidity. He had never seen any such books before; he had not dreamed that such books were in existence. They captivated his unsuspecting soul; and a desire for a seafaring life was awakened within him. It was too strong a desire to yield readily to maternal counsels, or the behests of reason. It took two years of a tender mother's care, and the grace of God in addition, to counteract the influence of those bad books; and even now, President Garfield will say, as he has said, "The sight of a ship fills me with a strange fascination." No boy ever scudded nearer the fatal precipice without going over. The details of this thrilling chapter of his young life will make thoughtful pupils dread the sight of such sensational books.

These are only three or four of the many lessons of his early and later life, which may be employed by teachers to incite the young, committed to their care, to better and nobler efforts. The lives of few men furnish so many varied incidents suited to interest and benefit the young, as that of our beloved President. Improving the "nick of time" to make the pupils familiar with his noble life, may prove more serviceable to them than arithmetic or grammar just now.

TEACHERS AND THEIR READING.

OFFICE BOARD OF EDUCATION,
KANSAS CITY, 1881.

Dear —— ——:

1. What Educational Journal do you now take?
2. What authors on "Education" have you read during the present school-year?
3. What works on "Education" have you bought during the present school-year?

Responses were received from eighty-one teachers to these questions: six teachers did not reply, or if they did, their answers were not received at the office. An analysis of the responses show the following facts: Forty teachers take one educational journal each; twenty-one take two; six take three; three take four; and seventeen take none. Twenty-four had read one book each; nineteen, two books; seven, three books; five, four books; and thirty-one had read no educational authors. Twenty-four had bought one book each; four had bought two books; one, three books; one, four books; and fifty-six had bought no books during the year.

When it is remembered that between 400 and 500 works on education have been published, in the English language, and a large number of these of recent date, embodying the very best thoughts of our most experienced and successful educators, the importance to teachers of keeping abreast of the current literature of their profession cannot be over-estimated. Observation establishes the fact that the stationary or retrograde teacher does not read, and is therefore a mere imitator, and is incapable of self-improvement. Education as a science is both inductive and deductive; empirical and rational. Empiricism unaided by the light of reason is quackery. Nearly all teachers are imitators; only the few are artists, skilled in their profession. Books record only the thoughts of others,—useful helps to prop up the growing teacher. They serve as fountains of inspiration, and stimulate thoughtful teachers to greater diligence and carefulness in the performance of their duties. The teacher, as well as the physician or lawyer, must read or be content to drop behind. The growing teachers in our corps are the thoughtful, reading teachers. The others seem to have their intellectual growth.—*J. M. Greenwood, Supt. of Schools.*

METHODS IN HISTORY.—(II.)

BY PROF. FLOYD CRANDALL,
Principal Belfast Academy, N. Y.

One difficulty has been experienced by every tracher of history. It is the tendency of pupils to forget. This, of course, is not confined exclusively to history, but no other subject seems to pass so completely from the memory, and in so short a time after leaving the class. One of the most frequent causes of trouble is the fact that the work to be remembered is but a series of disconnected events and dates. No other subject is more clearly stamped with the idea of cause and effect. This cannot with safety be ignored. Mere annals too often take the place of history. Every event has its cause and its result. Battles and campaigns are planned in strict accordance with this law, and they should be studied after the same law. One of the easiest methods is by drawing on the board a simple outline map of the region under consideration, and locating during the recitation the cities, forts, and routes of armies. This fixes it much better in the mind than mere reference to printed maps, since the class must decide upon the location of places before marking them, and take the events in their proper order.

We will take, for illustration, the military events in the West during 1862. *The rivers and boundaries of States are drawn upon the board, and the lesson recited after the following outline:* There is a strong line of Confederate posts from Columbus, which we locate and mark (1), through forts Henry (2) and Donelson (3), Bowling Green (4) to Cumberland Gap. The first move of the Northern army is obviously the breaking of this line. Gen. Grant starting from Cairo, passes up the river to Fort Henry. This is evacuated, and the garrison escapes to Fort Donelson. Grant's army crossing by land, and the fleet passing around by the rivers, invest Fort Donelson, and by its capture make a break in the line (5). Tennessee is now open to the Northern armies. Buell ascends the Cumberland and occupies Nashville (6). Grant ascends the Tennessee and takes post at Pittsburg Landing. The Confederates are concentrated at Corinth (7). The battle of Shiloh (8) soon follows. The Union army at first driven back to the river, are reinforced and defeat the Confederates, who fall back to Corinth. At the same time Island No. 10 (9) is taken, and Fort Pillow (10) and Memphis (11) soon surrender. In the fall come the battles of Inka (12) and Corinth, and on the last day of the year Buell's old army, now under the command of Rosecrans, defeats Bragg in the battle of Murfreesboro.

Thus we not only locate places and enumerate battles, but are also able to show very clearly the causes and results. There is the line of strongholds from Columbus to the mountains. It is broken at the great rivers. It is not difficult for a class to see what must follow. Henry and Donelson opened the way to every battle-field in these States. Nashville was taken, and the army passed on to Murfreesboro, Chattanooga, Atlanta, and the sea. Had Grant not taken Donelson, Sherman would not have marched to the sea. The way was opened to another army up the Tennessee, and Shiloh and Corinth naturally followed. These battles, producing their necessary effects, compelled the evacuation of Columbus and Fort Pillow, a hundred miles away, and opened the Mississippi to Vicksburgh. Will this not be remembered longer than a mere record of a half-a-dozen battles without knowledge of location, cause, or effect?

McClellan's and Grant's Peninsular campaigns, the

great campaigns of Sherman, Scott, and Washington, may all be studied in the same way. The maps are not difficult. Twenty minutes' preparation will enable almost any teacher to put the outlines on the board, and the subjec-tmatter should certainly be so thoroughly understood that the rest would be filled in without trouble. The writer has a sheet black-board containing an outline-map of North America. In the first epoch this is filled with the names of the discoverers in colored crayon, each nationality being of the same color.

The reviews should be so conducted as to trace each great series of events in logical order, and every place should be located on the map. Thus the student's mind, instead of being a lumber-room for the storage of miscellaneous odds and ends of knowledge, will be a well-ordered store-house, with every fact in proper place, labeled and ready for instant use.

OUTLINES FOR THE STUDY OF ENGLISH CLASSICS.

BY A. F. BLAISDELL, M.D., PROVIDENCE, R. I.

XXIX.—ALEXANDER POPE. 1688-1744.

"As truly as Shakespeare is the poet of man, as God made him, dealing with great passions and innate motives, so truly is Pope the poet of society, the delineator of manners, the exposer of those motives which may be called acquired, whose spring is in institutions and habits of purely worldly origin."—*J. R. Lowell.*

"Dryden was his great model. Perhaps his highest excellence lies in the same direction as that of Dryden lay,—in the power of sketching characters. He, too, was a skillful portrait-painter, but his style is very different from Dryden's. In one instance he has ventured to challenge comparison with his master, in his picture of Villiers, of *Zimri*, forlorn and dying. A careful juxtaposition of the two masterpieces will well illustrate the affinities and the differences of their authors."—*J. W. Hales.*

"He was about four feet six inches high, very humpbacked and deformed. He wore a black coat, and, according to the fashion of that time, had on a little sword. He had a large and very fine eye, and a long, handsome nose; his mouth had those peculiar marks which are always found in the mouths of crooked persons, and the muscles which run across the cheek were so strongly marked that they seemed like small cords."—*Sir Joshua Reynolds.*

Daniel Webster, alluding to his struggles to secure a good education, was often wont to speak of his solitary studies of the great English classics while at work as a boy in a saw-mill. Every spare moment he could get from his work he would devote to a close study of Addison, Pope, Shakespeare, and other classic authors. He spoke in particular of his reading Pope's *Essay on Man* until he knew every line by heart, reading and re-reading it for years afterward. In those days books were very scarce among our poor New-England farmers, and a stray copy of the *Essay on Man*, or the *Spectator*, was considered a valuable household treasure. Strong, hearty, vigorous mental food was a scarce article in those times, and a boy with a vigorous intellect as Webster had naturally sought the intellectual company of such authors as Pope, Dryden, and Addison. In these days the modern venal press has scattered broadcast literature of all kinds, both good and bad, in such abundance that the poorest child in the land has an opportunity to read anything he may choose. This artificial appetite for trashy and insipid literature should be counteracted in our schools by stimulating a desire for more nutritious mental food. It must be done gradually, however, and with the utmost caution. To this end, we have repeatedly urged teachers to begin by stimulating a desire among their pupils for the study of easy, pleasant authors, as Longfellow, Irving, Dickens, etc., and gradually working up to Goldsmith, Chaucer, and Burns. We have written this brief preface to the present article to advise teachers of English literature not to begin the study of Pope, Dryden, and several other classic authors until their pupils shall have been well drilled in the sixteen to twenty "representative authors," which we have considered in the preceding articles of this series. Pope is a dry, hard, and formal author to study in the school-room, whose writings are full of deep thoughts, expressed in a severely exact and classical style, lacking in that genial sympathy and warmth which pervades the poems of Burns, Whittier, and Goldsmith. After a faithful study of the authors we have mentioned, the advanced student may proceed to read with considerable profit the writings of Alexander Pope and John Dryden.

I.—EDITIONS.

1. POEMS. Edited by A. W. Ward. "Globe" Edition. $1.25.
2. *Essay on Man.* Introduction and Notes by M. Pattison. "Clarendon Press Series." 40 cts.
3. SATIRES AND EPISTLES. Same Editor, and Series. 50 cts.
4. *Essay on Man.* "Vest Pocket" Edition. 50 cts.
5. *Essay on Man.* "People's" Edition. 25 cts.
6. POEMS. "British Poets" Edition. $1.00.
7. *Rape of the Lock;* with Notes. Hales's *Longer English Poems*, page 39.

Several publishers have issued cheap school editions of the *Essay on Man;* price, about 20 cents.

The "Globe" Edition, mentioned above, is the carefully-revised text taken from the best editions. Abundant notes are added, including Pope's own, the best of those of previous editors, and many which are the result of the study and research of Professor Wood, who has been careful to verify all the quotations transcribed by his predecessors. The "Introduction" not only sets fully and fairly Pope's life and character as a man and a poet, but will be found to shed considerable light on the political, social, and literary life of the period in which he played so important a part.

II.—REFERENCES.

Besides Taine, Collier, and Shaw, read Miss Sanborn's *Home Pictures*, Field's *Yesterdays with Authors*, Thackeray's *English Humorists*, and an essay by J. R Lowell in the *North American Review* (January, 1871), and republished in *My Study Windows.*

The advanced student may wish to consult the *Life of Pope*, by Dr. Johnson, Warton's Essay, Roscoe's Life, De Quincey's Essay, Reed's *Lectures*, and Hazlitt's *Lectures on the English Poets.* Carruther's Life is one of the latest and best. Dyce's *Memoir* is one of the best of the briefer accounts of Pope, while the latest information is given in the valuable introduction to Elwin's new edition of Pope's Works. See, also, Disraeli's *Curiosities of Literature* and *Quarrels of Authors;* Drake's Essay, F. W. Robertson's Lecture, Kingsley's new Miscellanies, Peabody's Literary Remains, and Spence's Anecdotes, one of the best authorities on Pope's private life.

V.—SELECTIONS TO COMMIT TO MEMORY.

The sharp, caustic, and philosophical verses of Pope have always been famous. Whether or not we may always believe in the spirit manifested in much of Pope's bitter satire, matters very little. Familiarity with his best passages is something which will prove of great value to most people sometime in their lives. If, in conversation or writing, you wish for a bright, pointed, and apt quotation, one or more lines will come to mind at once if you are familiar with Shakespeare and Pope. By all means, have a cheap copy of the *Essay on Man*, and mark with pencil, choice lines, and commit them at your leisure. For example, we give below a few select passages from this famous poem:

1. Eye Nature's walks, shoot folly as it flies.—[I., 13.
2. Who sees with equal eye as God of all.—[I., 87.
3. Hope springs eternal in the human breast.—[I., 95.
4. All nature is but art, unknown to thee.—[I., 289.
5. Know then thyself, presume not God to scan.—[II., 1.
6. On life's vast ocean diversely we sail.—[II., 107.
7. Vice is a monster of so frightful mien.—[II., 217.
8. Order is Heaven's first law.—[IV., 49.
9. The soul's calm sunshine and the heartfelt joy.—[IV., 168.
10. Worth makes the man, and want of it the fellow.—[IV., 203.
11. An honest man's the noblest work of God.—[IV., 247.
12. That virtue only makes our bliss below.—[IV., 397.

III.—GENERAL QUESTIONS ON POPE AND HIS WRITINGS.

What do you know of Pope's parents? What were the peculiarities of his education? Give some account of his physical defects, his prudence, and generosity, his filial affection, and his house at Twickenham? Who were his earliest patrons, and what were his first literary efforts? What circumstances led to his quarrel with Addison? Of what treachery was he guilty toward Bolinbroke? Discuss his propensity to petty artifices. Who was his "guide, philosopher, and friend," and who defended his system of philosophy against Crousaz? Under what circumstances was the *Rape of the Lock* written? What change did he make in its first plan? Point out the leading merits of the *Essay on Criticism.* What are the faults of the *Essay on Man?* Where did Pope get the hint for *Eloisa to Abelard?* What objections may be made to the design of such works as the *Imitations of Horace?* When was Pope's translation of the *Iliad* published? Describe its progress; show how carefully Pope corrected his lines. To whom was it dedicated? Was it successful? Who wrote the notes and life of Homer? Who helped Pope in the translation of the *Odyssey?* Mention other translators of Homer. Under what circumstances were Pope's letters published? Are such productions a true test of character? Mention some other collections of letters in English? What epic did Pope think of writing? Who was the hero of the second edition of the *Dunciad?* Give the substance of Dr. Johnson's celebrated comparison between Pope and Dryden. What was the fundamental principle of Pope's intellectual character? Show that he had all the elements of genius, and was truly a poet.

IV.—QUESTIONS ON POPE'S "IMITATIONS OF HORACE."

What were Pope's political views as embodied in these satires? Name the prominent contemporary literary men whom he holds up to contempt. Who are his principal examples of corruption, meanness, and avarice? Whom does he select for special praise? How does he refer to Royalty, the Prime Minister, and the leading members of the Opposition? What insight does the poet give into his religious opinions, and early training; the virtues of his parents, his social habits, and personal appearance; his hospitality, independence, intimacy with the great, and contentment? What are the leading topics referred to in the Prologue to the Satires? Under what name is Addison ridiculed? How are his merits set forth in other passages? Under what names are Lady Montagu, Lord Hervey, and Lord Halifax ridiculed? What references does Pope make to the South Sea Scheme, the caprices of the rich, the evils of luxury, his own moderation, and personal satire? In the Epistle to Bolinbroke, how are the pursuit of wealth rather than virtue, and the low aims of the people censured? Show that in addressing Augustus, Pope turns the flattery of Homer on the emperors into a bitter satire on George II. What are the principal points of the two dialogues in the Epilogue? In what terms does the poet assert the complete triumph and dignity of Vice, and apostrophize Ridicule?

ELEMENTARY PHYSICS.

BY I. J. OSBUN.

Exercise No. XII.

Apparatus necessary in the following exercise: A lamp chimney, a weighted disc of pasteboard or stiff leather, a thread, a jar of water, a tobacco-pipe, a little disc of soft, smooth leather, a piece of rubber tubing or a straw a little longer than the chimney.

EXPERIMENT.	OBSERVATION.	INFERENCE.
Plunge several inches vertically into a jar of water, a common lamp chimney. Observe the height of water within and around the chimney.	The liquid is at the same height.	
Draw up against the lower end of the chimney a weighted disc of pasteboard or stiff leather, by means of a thread attached to its middle, which passes through the chimney, and then release the grasp upon the thread.	The disc falls away from the chimney.	A body unsupported in water tends to fall just as in air.
Draw the disc tightly again to the chimney, and by means of the mouth, a tube or straw, draw off the water above the disc inside the chimney, then let go of the thread.	The weighted disc does not fall away from the lower end of the chimney.	There must be pressure upward upon the under-side of the disc greater than the weight of the disc.
Pour water slowly into the chimney above the disc.	The disc falls away.	The pressure of water downward above the disc, added to the weight of the disc, is greater than the pressure upward below the disc.
Hold the disc tightly to the chimney, plunge one inch into the water, and release the grasp.	The disc falls away.	The deeper the liquid is around the chimney the greater the upward pressure.
Repeat by plunging two inches.	The disc falls away.	
Repeat at three, four, and five inches.	The disc finally is held to the chimney.	
Plunge vertically, six inches into the water, a common tobacco-pipe, over the smoothed mouth of which is held by one hand in the water a little disc of very soft, smooth leather, and then take the hand from the leather.	The leather disc is held to the bowl of the pipe.	There is a sidewise pressure within the liquid.
Twist the pipe about in all directions.	The leather disc is held to the bowl.	
Repeat the experiment at various depths.	The disc clings only at a certain point.	The greater the depth, the greater the sidewise pressure.

General Inferences.—Within a liquid, as, for example, in a pail of water near its bottom, or in the ocean, there is a downward, sidewise, and upward pressure, great or small according to the depth.

The pressure *sidewise* and *upward* is due to the *weight* of the liquid *transmitted* in these directions.

EVERY DAY A LITTLE. — Every day a little knowledge. One fact in a day. How small is one fact! Ten years pass by. Three thousand six hundred and fifty facts are not a small thing.

Every day a little self-denial. The thing that is difficult to do to-day will be an easy thing to do three hundred and sixty days hence, if each day it shall have been repeated. What power of self-mastery shall he enjoy who, looking to God for grace, seeks every day to practice the grace he prays for.

Every day a little helpfulness. We live for the good of others, if our living be in any sense true living. It is not in great deeds of kindness only that the blessing is found. In little deeds of "kindness," repeated every day, we find true happiness. At home, at school, in the street, in the neighbor's house, in the playground, we shall find opportunity every day for usefulness.

Every day a little look into the Bible. One chapter

a day. What a treasure of Bible knowledge one may acquire in ten years! Every day a verse committed to memory. What a volume in twenty-five years!—*Kind Words.*

ABOUT WILD-FLOWERS.—(XX.)

BY H. L. CLAPP.

Sept. 1. If each month were to be represented by a particular flower, September would be represented by the Aster or Starwort, fringing the roadsides with innumerable star-like flowers, white, azure-blue, lavender, purple, and crimson, with countless tints so subtle that the discriminating eye of the painter cannot catch them. During this month, also, there appears the Saratoga and Newport part of the Aster Tribe,—the aristocratic China Asters of the gardens,—which, though so changed from their natural state, though cultivated to excess, and always on dress-parade, feel obliged to have their season when their humble country relatives have theirs,—much like the world at large, so dependent is one class on another. However, the real lover of nature finds as little pleasure in conventionalized flowers as in cultivated Newport.

The species of the Aster Tribe are numerous, and the varieties difficult to determine, but so little is generally known regarding this tribe that the most useful work now is to indicate the distinguishing characteristics of the plainest species. To many persons who are supposed to know better, an Aster is simply an Aster,—the one species undistinguishable from the other. They think of the Aster Tribe as a difficult one to study, and give up almost at once. It is true there are difficulties to overcome if we try to determine every Aster we come across, but *there are some whose characteristics are very plain*, and we will begin with those, hoping to gain interest and

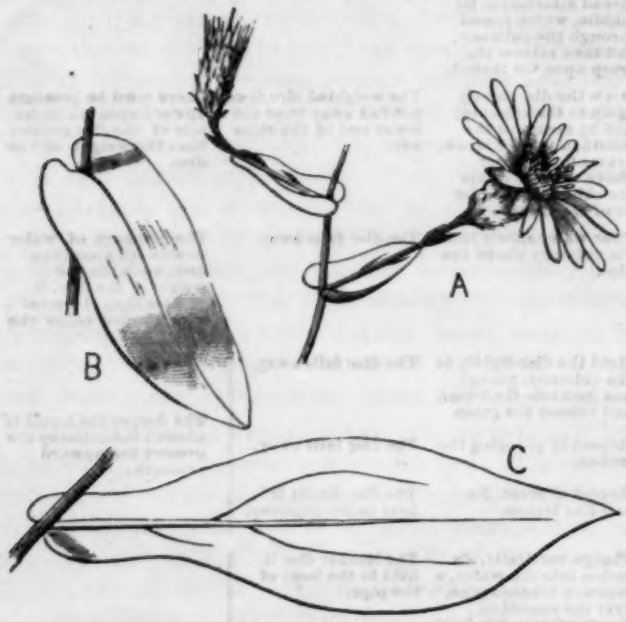

FIG. 19.

strength enough, as we go on, to enable us to determine the more difficult species at last.

The Spreading Aster (*Aster patens*, Fig. 19, *A*) is characterized best by the leaf (Fig. 19, *B*), which is *clasping by a deep, heart-shaped base, rough on the margin*, and *entire*. Fig. 19, *B* represents a middle leaf, those at the top being represented in Fig. 19, *A*, which also shows the small, bract-like leaves, common on the peduncles of the flowers; the lower leaves are broader, often contracted below the middle, and generally pitch downward; the scales of the involucre have spreading, pointed tips; the *stem* is erect, *rough-pubescent*, about two feet high, the wide-spreading branchlets being terminated by single heads; the *achenia* are *silky*, and the rays purple, one half-an-inch long. The plant grows by bushy roadsides, in dry ground. The plant should always be tested by the italicised words of the description first, and if they do not apply exactly, the plant must be referred to another description.

The Smooth Aster (*Aster lævis*) is an elegant species, with *azure-blue or violet rays*, as long as those of *Aster patens*, which it resembles in its mode of growth (habit), height, and locality, but it is *very smooth throughout;* the *buds* are *ovoid* (egg-shaped); the *scales* of the involucre have green points, not spreading at all (*appressed*); the *achenia* are *smooth;* the *leaves* are *thick, lanceolate, entire* (Fig. 19, *C*), rough-edged, the *lower contracted below the middle* into a margined petiole (sometimes two inches long), and clasping at the base, the *upper heartshaped at the base*, those on the peduncles very small and bract-like; the very straight peduncles are terminated mostly by a single head as large as Fig. 19, *A*. This beautiful species once clearly identified may always be recognized at a glance. August 25 it was just coming into blossom abundantly in the southern part of New Hampshire. The variety *cyáneus* is very *glaucous* (having a sea-green bloom), has *thicker leaves*, and is common northward in the edges of woods.

More common in the borders of woodlands is the Corymbed Aster (*Aster corymbosus*, Fig. 20, *A*), with corymbs of *middle-sized heads*, each having from *six to nine white rays;* the *stem* is *slender*, often a *little zigzag* and red, and two feet high or

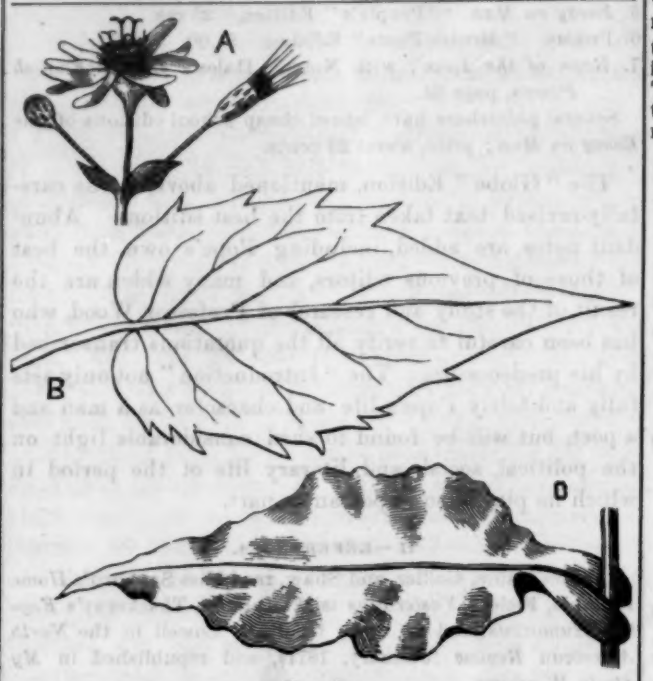

FIG. 20.

less; the *leaves have coarse, sharp, spreading teeth*, at unequal distances and of unequal sizes, and *conspicuously long, sharp points* (Fig. 20, *B*); all the leaves are *thin*, and rather light-green, the *lower* being *heart-shaped* at the base, and *on slender petioles;* the involucre is ovoid, and the scales are appressed. There is a chance to confound this species with the *Aster acuminatus*, since both grow in similar places, and have some points alike; but a careful distinction will be made at the proper time.

The Wavy-leaved Aster (*Aster undulatus*) is distinguished by *wavy-margined leaves* (Fig. 20, *C*), the *largest heart-shaped on margined petioles*, the *highest sessile and heart shaped*, and the *middle contracted toward the base into a petiole with broad margins and heart-shaped base*, as in the illustration. The upper leaves usually have a less undulatory outline than the others, but the middle leaves in this species, as well as in other species, are the most constant in form, and should receive special attention. The heads have blue rays, and in size are between *A. lævis* and *A. corymbosus*. This species is common in dry, open woods and bushy places.

Many double wild Asters have been found this season, some having only two or three disk florets, while the filaments of the ray florets were very long, like those of the Chicory, making the center of the head look hairy. Every plant had nearly all the heads double, when any, and closely resembled *A. undulatus*.

NOTE.—*Sept.* 6. On the woody hill beyond the wet meadow, in front of the Dorchester Station, are found the Doubled-bristled White Aster (*Diplopappus umbellatus*, two to six feet high), Wavy-leaved Aster, and rare specimens of *Aster Lævis* and the Linear-leaved Aster, both having violet rays of remarkable beauty. In the low land north are found the Purple Gerardia, Water-pepper, Arrow-head, Arrow-leaved Tear-thumb, and Butter-and-eggs.

NOTE.—*Sept.* 10. Around the Mattapan station (N. Y. & N. E. railroad), and for half a mile this side, there is an unusual abundance of flowers, including Turtle-head, Joe-Pye Weed, Golden-rod, Clematis, Water-pepper, Toad Flax (all very abundant), Long-leaved Aster (in the low land), Corymbed Aster (very abundant in the woods beyond the station, left side of track), *Aster patens*, and *A. undulatus* (in the woods on the right), *Aster lævis* (elegant specimens between the two bridges this side of the station), Purple Gerardia, Ladies' Tresses, and other varieties (in the low land, forty rods back of the station). But few specimens of Cardinal-flower were seen to-day,—rather late.

SCIENCE.

— An immense galvanic battery has been constructed for use in the lectures at the Royal Institute, London. It consists of 14,400 cells of chloride of silver and zinc elements. Each cell is composed of a glass tube about the size of a large test tube, stoppered with a paraffine wax stopper, through which the zinc rod and chloride of silver are inserted, a small hole being left to pour in the solution, which consists of a weak solution of chloride of ammonium (sal-ammoniac), the hole being fitted with a small paraffine stopper to make it air-tight. The tubes are mounted in trays, each containing 120 cells; eighteen trays are fitted in each cabinet. The battery, which is in the basement of the building, was begun in June, 1879, and finished in August, 1880. The charging of the battery occupied three persons a fortnight. A lightning-flash a mile long could be produced by 243 such batteries.

— It appears that electric cats are a simple and cheap means of illumination. Prof. Maynard of Cincinnati is said to own the most powerful electric battery in the world. He is also the proprietor of a black tom-cat, unrivaled for beauty, size, and intelligence. A few days since, so the story goes, these two belongings of the professor came by chance into contact in such sort that the cat became the recipient of a stream of electric fluid estimated at one thousand horse-power. Forthwith his hair stood erect, emitting a brilliant corruscation of sparks. A series of squalls, however, calling the professor's attention to his favorite's situation, he promptly disconnected the cat from the battery, but to his great surprise found that it remained luminous, having taken such a dose of electric fluid that it had become a permanent generator of electricity; giving out a light equal to that of eight hundred wax candles. This it has since continued to do, it is said, and it is now the terror of its feline colleagues as it perambulates the tiles by night, blazing like a comet, but with insufferable radiance.

AMBITION AND SCIENCE.

(Suggested upon seeing Bailey's Astral Lantern.)

There lay, in the Scottish meadows,
A wondrous, clear-eyed lad,
Wrapped up in midnight shadows
And the folds of a shepherd's plaid;
Lay, long and eagerly gazing
With wonder-straining eyes,
At God's own jewelry, blazing
Upon the stately skies;
He looked in the stars' sweet faces,
They fed his nature's needs,—
He marked their glowing places
With strings of glistening beads.
To the fame his soul ne'er doubted
His quick brain drove him on,
Till the world with honor shouted
The name of Ferguson.

But now, when youth's mind-vision
Would range the mystery-sky,
Pale Science's strange precision
Has mapped it for his eye;
And captured the stars in cages,
And mocked their flickering flame,
Subdued these kings of the ages,
And made them come by name;
On earth the stars are brightening,
Brought down from clouds of space,
As Franklin drew the lightning
And gave it useful place.
And the Scotch boy's spirit, turning
From new-found stars above,
Looks down on this glow of learning
With smiles of pride and love.

VARIETIES.

— An editor who was told that his last article was as clear as mud, said: "Well, that covers the ground, anyhow."

— A man advertises: "Hands wanted on boys' pants." Hands won't do any good now-a-days; it needs a leather strap.

— Love, Love, my Love,
The best things are the truest;
When the earth lies shadowy dark below,
O then the heavens are bluest!
—*R. W. Gilder.*

— A grocer had a pound of sugar returned, with a note saying: "Too much sand for table use, and not enough for building purposes!"

— *Professor to child* (angry at inattention): "Another minute, mees, and I shall go and speak to your mamma." *Pupil:* "Well, take care pa don't catch you at it, that's all! He's awful jealous!"

— Faith is not a form, but a spirit; not an idle fancy of the brain, but a life in the heart. It is everything and anything which busies you about duty for Christ's sake.—*W. I. Budington.*

— Those who toil bravely are strongest;
The humble and poor become great;
And so from these brown-handed children
Shall grow mighty rulers of State.
—*M. H. Krout.*

— How can a man name his child William? The horrid idea of the partner of his joys and sorrows presenting him with a *Bill!* and to have that Bill ontinually in the house, constantly running up and down stairs,—always unsettled!—*Lieut. Derby* ("*Squibob*").

— *A Chicago Girl at Concord,*—A young lady on the west-side has just returned from Boston. While there her uncle, who is a reporter on a sporting paper, took her to the Summer School of Philosophy at Concord. She heard some one read an essay on the "The Absoluteness of Absolutism," and became infatuated with the doctrine taught.

"Chawles," said she to her lover the other evening (he is a clerk in a harness-store): "Chawles, do you realize that you cannot differentiate the indissoluble absoluteness of the absolute?"

"No," he replied, "to tell you the truth, I don't;" and, as it was the first time he had seen her since she got back, the suggestion uttered struck him with some alarm.

"Do you ever stop to inquire," she began again, "into the inchoation or the rudimentary incipience of the rhapsodical coagmentation of your thoughts of love?"

"Well, not to speak of," he said.

"Then, if there is one drop of blood in your heart that pulsates for me; if there is one conceit, nooscopic or psychological, that in the incogitancy of your dreams, or in the perquisition of your waking hours, absorbs a thought of me, I beg that you would eliminate any abstruse or equivocal particles of distrust from the profound and all-transpicious abnormality of your love."

"Great heavens! Maria, have you swallowed a dictionary?"

"No, I have not," she said, with a look of stern and forbidding displeasure; "I have been to the school of philosophy at Concord."—*Inter-Ocean.*

CORRESPONDENCE, NOTES, AND QUERIES.

[The Editor is not responsible for opinion in THE JOURNAL except as expressed in the editorial columns, or over his signature. He cannot promise to return rejected MSS., or correspond with the writers. Correspondents should aim at brevity; the pressure on our columns imperatively demands it.]

NORMAL-SCHOOL PUPILS.

You say, in your issue of Sept. 1, that "the State normal schools are compelled, by popular clamor, to receive numbers of young people badly trained in elementary studies, without maturity of mind to *grasp* the idea of science, especially as applied to instruction." Be that as it may, in one Massachusetts normal school, during the last year, only half the number were admitted who applied. That looks as if the principal of that school meant *not* to devote "a great deal of the time spent in the school" "to academical instruction."

The graduates of that school do *not* "have an outfit of the favorite methods of teaching a few school studies, elaborated by the principal of the school." They do have a philosophic training, and are taught to think for themselves, and are expected to make their practice agree with correct principles.

"Failures are numerous." Are they? I know personally at least one hundred graduates of that school, and out of that number two are said to have failed. One of these has never taught but one term, and the other, one or two terms. I think that both of them would have succeeded if they had had a chance in a school better suited to them. But, calling these two *failures*, is two per cent. enough to call failures "numerous"? A number of the school committee in a neighboring town told me that when they wanted a teacher, they sent to —— Normal School, and they almost invariably got good teachers. As the committee of this town have continued to send for graduates of this school for ten years that I know of, it would seem that they were satisfied.

Then you say "the normal-school principals have a careless habit of certifying to the skill of their graduates." I know that to be untrue of at least two of the Massachusetts normal schools. On the contrary, they are *very careful* on that point. In one instance, a girl had such a high temper that the normal teachers thought teaching would not be her *forte*. They therefore talked with her and advised her to learn dressmaking. She did so, and was successful at her trade. I know of a number of others who were persuaded to give up the idea of teaching because, it was thought, they had not the natural qualifications for it. Still others were allowed to remain much longer than the usual time required for graduation, the teachers being determined not to give a diploma till they could conscientiously do so.

Of course, normal graduates are not perfect; also some are better suited for one kind of a school, and others for another kind; but no one can graduate from a Massachusetts normal school without being much more likely to do well than she would without the normal training. I speak of Massachusetts normal schools because I know more about them than about those in other States. N.

SUMMER SCHOOLS AND INSTITUTES.

In THE JOURNAL of Aug. 25 was an editorial upon the "Summer Schools and Institutes," which pleased me throughout, but which contained the following sentiments, which appear to me worthy of more than a passing notice:

"We must insist that every university, college, high school, and superior academy, private and public, shall take hold of this work and supplement the effort of the public normal school. For the coming twenty years, a thorough course in didactics, including the philosophy of the mind, would be a blessing to every pupil of the secondary or higher education, whether intending to teach or not."

In this statement you have indicated, as I believe, the direction in which educational reform must be pushed to accomplish what all the friends of our common schools have most at heart. I would be the last to favor the suspension of any of our normal schools; I feel that our system of education would be sadly incomplete without them; but still the fact remains that, thus far, they have accomplished little in school grades above the elementary, and their good offices in them have been confined mostly to the cities and large towns. Our ungraded country schools drag along their weary course very much as in bygone days, for the want, among other things, of teachers of even a moderate degree of professional training. Were the number of pupils at the normal schools largely increasing, and especially from the rural towns, we might be encouraged to feel that in time the present agencies would bring the needed relief; but this is not the case to any marked degree, so that we must look to another quarter for what we need, and for what, I believe, the people will soon demand.

Now, in the above quotation from your editorial, if I mistake not, there is indicated what, if realized, would bring not only incalculable good to the institutions referred to, but to all our common schools. Very few of our young people are willing to assume the expense and devote the time incident to a course of study at some one of our normal schools, and a far less number would submit to such an ordeal as the German candidates for teachers' positions pass through. But nearly all our teachers have been students at, or are graduates of, high schools and academies. Now, why may not normal methods, which are supposed to be the best, be employed in these institutions in respect to everything that is taught? If this course is pursued, the students will learn a right method, and will almost instinctively apply it to other branches if called to teach them. But many of the common-school branches are pursued in these institutions, and if taught, as in normal schools, the result must be as good.

But, besides this, let there be a teachers' class every term, to which there may be given a few hours each week; and to stimulate attendance upon this, let certificates of graduation be issued to those who go through the whole course, which should be quite complete. As you say, such a course would be a blessing to every pupil, whether intending to teach or not, for it will furnish a training that all will need.

Acton, Mass., Aug. 26, 1881. F. P. WOOD.

SCHOOL MORALS.

The articles which have appeared in THE JOURNAL in reference to this subject, written by Mr. M. W. Hazen, have more importance than would appear to the casual reader. It was my pleasure to talk with Mr. Hazen upon this matter, coincide with his views, and put the same in practice, before he gave them to the public.

The first thought which arises, after an experience of some six months, is one of surprise that the plan has never been tried before. It greatly simplifies the whole matter of school discipline, and renders the work of teaching far more agreeable and successful. However public opinion may differ with Mr. Hazen as to the extent of the injury to good morals, caused by the promiscuous assemblage of school-children at the recess, before and after school, a more candid and careful observation of *facts* will show that the gentleman does not speak at random. The influences which operate upon the playground are mischievous, affording almost the only necessity of maintaining the custom of corporal punishment. It is absurd in the extreme to suppose that any body of school-children have sufficient moral strength to properly govern themselves. We are all naturally sensitive in speaking of the morals of our schools, and often shut our eyes to many evils rather than admit the truth, using, nevertheless, such precautions as may be best known. It *should* be known that giving up the recess and preventing the children from assembling promiscuously, so far as possible, is the most potent remedy yet devised or tried. Experience has demonstrated that the recess is not a necessity. In many towns and cities it has been abandoned in the afternoon, and the session shortened to two hours. In Woburn there is no recess at either session for grades above the primary. In the latter no session exceeds two hours, and the recess is still retained.

At the outset, a vote was taken in one of the largest grammar schools as to whether the morning recess should be given up, provided the session were shortened one half-hour, making it two and one-half hours. More than ninety-five per cent. voted for the change. After a trial of one week, another vote was taken with even a greater percentage in its favor. It was then submitted to the school committee, who voted to continue the trial one month, at the end of which it was unanimously adopted in all the grammar schools. It has increased in popularity with all classes, — committees, teachers, scholars, and parents.

Some of the advantages are these: You no longer hear the loud shouting, at certain hours of the day, which everywhere designates the location of the school-house. Each pupil, as soon as he enters the school-grounds, proceeds at once to the schoolroom, takes his seat, and goes to work. All are in peace before the hour for opening the school is at hand, and it is all done so quietly, — no loud talking, not even whispering, after the building is entered, — that one can hardly realize that everything is in readiness for business. The tone of the whole school is perceptibly changed and elevated, the pupils wear a more dignified bearing, and the fact is disclosed that the average schoolboy, under rational conditions, is not necessarily totally depraved. It is understood and accepted that the school is no longer a place in which to seek amusement, or plan and execute mischief. The smaller children can attend without fear of injury or abuse from the larger boys, — often a serious matter,—or from a class often styled the "bullies," and other persons from whose influence parents had no means of shielding their children; and from this class of parents is expressed heartfelt indorsement.

The first impression of the teacher is a sense of rest, as she no longer experiences the noise and confusion incident to the filing, the playground, and often from the tap of the drum. She is obliged to be on duty a little earlier, but the opportunity for explanations, making-up of lessons, etc., is invaluable. The work of the schoolroom is more easily and successfully performed in the two and one-half hours than in the three; and if the time were reduced to two hours the efficiency of the school system would be enhanced.

The only argument which can be made for retaining the recess is the importance of breathing the fresh, out-door air. It is a forcible one, but does not compensate for the evils to be endured; besides, the atmosphere of the room can be changed as often as required by opening the windows, introducing, at the same time, some marching or gymnastic exercises. The dullness of the schoolroom can be relieved at any time by many pleasing exercises which the genius of the teacher is able to suggest.

No trouble whatever is experienced by the scholars asking to leave the room. Everyone who makes the request is allowed the privilege, but forces are brought to bear which regulate this as it should be. Young and inexperienced teachers have shown less wisdom in the management of this matter than any other in the school discipline, and they should receive definite instructions from superintendents and school committees.

From experience I can emphasize the importance of the leading thought in Mr. Hazen's suggestions: "Keep schoolchildren, as far as possible, from all communication one with another while at school, unless it be done under the eye and direction of the teacher.

E. H. DAVIS,
Supt. of Schools, Woburn.

A SUGGESTION.

Please say to "C. E. R." that the hairs of the fringed stamens of the *Tradiscantia Virginica* show very finely the movement of protoplasm, if placed on a slightly-warm slide, under a high power. ALICE M. GUERNSEY.

QUERIES.

No. 170. Is there a book out treating of the Tonic Sol-fa method of teaching music? E. E. O.

LITERARY ECLIPSES.

[This department of THE JOURNAL is under the charge of W. H. EASTMAN, *Auburn, Me.*, to whom all communications relating thereto should be addressed. Solutions to the following, also good original puzzles for publication, are solicited. *Answers in two weeks.*]

NUMERICAL PUZZLE.

I am composed of as many *words* as there are *characters* in "The Arabic Alphabet of Numbers."

Find these words and the number of letters in each word. Write the numbers horizontally, and they will express a sum more than three times "The National Debt" at its maximum. Then write so as to express an event recently celebrated in our country's history, and an age rarely attained by man. Now add a figure of the same class, and express the number of years that elapse between the taking of the census. The excess of letters in one word over another, is what God is said to have made the world out of. My all may be found in the most important table in chemistry. A TRAMP.

ANAGRAMS.

(Names of animals.)

1. Son lies.
2. His moca.
3. Honor cries.
4. Cats go am here.
5. Neat help.
6. Rag fife.
7. I mop thus a pop.
8. Ohelm cane.

MAGIC LATIN WORD-SQUARE.

* * * *
* * * *
* * * *
* * * *

Four words of four letters each, and each word contains every letter. *Definitions:* name of a city; a region (*oblique case*); family name of a poet; name of a god. Can be arranged in four different ways, and be read down, up, right, or left, with same result every time. Also, each diagonal is composed of but a single letter four times repeated.

NILLOR.

PECULIAR WORD-SQUARE.

* * * *
* * * *
* * * *
* * * *

Two words of four letters each, and but two different letters used. *Definitions:* to blow; fragrant oil. Can be arranged in two different ways, and in each case the readings, — down, up, right, and left, — are *strictly identical*. Also, each diagonal is composed of but a single letter four times repeated.

NILLOR.

ANSWERS TO PUZZLES FOR SEPT. 1.

ENIGMA.—Thus conscience doth make cowards of us all, and thus the native hue of resolution is sicklied o'er with the pale cast of thought.

CHARADE FRANCAIS.—Adieu.

WORD SQUARE.—
H E R O N
E N E M A
R E S E T
O M E G A
N A T A L

HORSFORD'S ACID PHOSPHATE
IN NERVOUS PROSTRATION.
It is the best tonic I know of in debility and nervous prostration, with sleeplessness, caused by mental overwork or prolonged lactation.
San Antonio, Tex. A. E. CAROTHERS, M.D.

Journal of Education.

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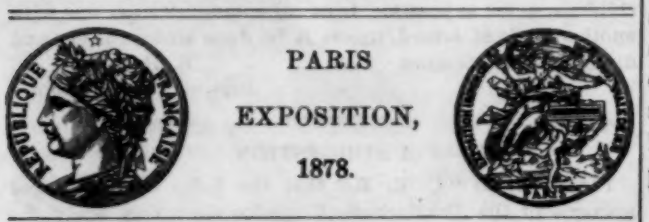

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THE week has been filled with events of great historic interest. It has been a week of prayer, unlike any other in the annals of the world. The chief magistrates of the leading States of the Union, moved by a common impulse, responsive to the desires of all the people, appointed Tuesday, Wednesday, Thursday, and Friday, respectively, as days for prayer to Almighty God for the recovery of our beloved President. It was no formal service, and from one side of the continent to the other, praying men and men unused to a devotional spirit lifted up a common desire that the healing mercy of Heaven might be bestowed on our Nation's Chief Magistrate, as of old it was granted to the lame, the paralytic, and the blind. Not only was our Nation on its knees in supplication to God, but the whole Christian world united in sympathy with the prayer of our people, all witnessing before Heaven to a trust in the Great Disposer of events, whose will must be done in all things. While this great multitude of people was in intercession, the President and his physicians decided upon his removal from Washington to Long Branch, in the hope that the vivifying air and sun at the seaside would impart vigor, and soon destroy the ill-effects of the malarial atmosphere of Washington on the sufferer. This remarkable journey taken by President Garfield, his wife, his physicians, and the Cabinet, in a special train of three cars, occupied seven and one-half hours, in a trip of over two hundred and fifty miles from Washington to Long Branch. So complete were the arrangements, and so comfortable were the cars, that the President seemed to enjoy the journey, and called it "the most interesting day" since he was shot. Mr. Garfield's tremendous vitality and heroic endurance were put to the severest test by this day's experiences, but through it all he showed patience, confidence, and hope, which inspired his physicians and attendants and the Nation that his desires and efforts for these better conditions of living might be the augury of his recovery. Since his arrival at Long Branch, though at first wearied and feverish from the long journey through an excessively hot day, he has shown encouraging signs of restored strength, and has held short interviews with the members of his Cabinet. As we go to press, we are encouraged to hope that his precious life will be spared to us, although the symptoms of restoration are not so marked as we could desire. We are sure that all that medical skill can do to aid the great restorer Nature, under the Divine ordering, is done, and will continue to be, until this terrible tragedy shall be converted into a great national thanksgiving, or lead to the grave of our cherished hopes.

ANOTHER event which will mark the 6th of September, 1881, was the occurrence of a phenomenal darkness over a large portion of the United States and Canada, equaling "the *dark day*," May 19, 1780. The clouds which obscured the sun nearly all day were of a pale yellow color, and the grass, trees, and foliage were of a peculiar green color,—in some instances shading almost to blue. Lamps and gas-jets were lighted in Boston, and were kept burning in stores and houses from ten to five o'clock. Fowls went to roost, crickets chirped as at twilight, frogs croaked as though night had come on, and all the phenomena were strangely peculiar, so much so as to alarm the ignorant and the superstitious. Generally throughout New England the schools closed at noon, or at an earlier hour. The following is Rev. John Marratt's account of the Dark Day of 1780; he was, probably, a better observer than grammarian or speller:

1780, May 19. Morning, thunder & rain; Domi [domiciled is at home]; an uncomon Darkness from ½ 10 ck a. m. to ½ past 1 p. m., so dark yt I couldn't See to read comon print at ye window, nor see ye hour of ye clock, unless close to it, & scarcely see to read a Bible of large print; abroad ple [people] left off work both in the house and abroad; ye fowls, some of ym went to roost; it was clouldy; wd. [wind] s. w.; ye heavens looked yellowish and gloomy, whts ye occasion of it is unknown; ye moon fulled yesterday morning; many persons much terrified; never known so dark a Day; ple lit candles "to see to dine!" Night, some cloudy, some fair; wd. w.; extraordinary Dark, notwithstanding a moon; it is cloudy, but no rain; couldn't see where the windows of the house were, not till ye moon was an hour high, nor see ye hand, tho close to ye Nose, any more [than] you [could] if ye Eyes were shut!

THE darkest days, and saddest events of the week have been witnessed in Michigan, where forest and prairie fires have devastated large sections of country destroying immense quantities of timber, houses, barns, crops harvested and unharvested, cattle and horses, and large numbers of lives. More than 15,000 families are reported as homeless, and 10,000 people are without shelter, food, and proper clothing. It is feared that the number of dead by the fire may exceed 1,000 persons. The story of suffering is too terrible to believe, and yet it is not and cannot be told. Relief must come speedily to these homeless people, who have lost the results of years of labor, save the bare land on which their homes were located. All who can minister help by money, food, and clothing should respond at once, and relief-committees should be raised in every community in the land. Our readers will be prompt to respond, even though their income be scanty. A little in direst need is better than a fortune in affluence.

THESE forest fires, raging along the lakes in Canada and northern New England, are a partial explanation of the dark day of the 6th of September. The light fog-cloud was mingled with the smoke and gases from the fires, and the low-hanging clouds gave to the sun the same peculiar color as appears when it is observed through a smoked glass. The grass, trees, etc., took on the same livid green as appears when looking at the ground and the trees in a solar eclipse. The comet's tail may also have brushed across the earth, but we are inclined to the opinion that it had as little to do with the phenomena as Tenterden steeple with Goodwin Sands.

SUBSCRIBERS to THE JOURNAL OF EDUCATION will receive THE JOURNAL and our new bimonthly EDUCATION for $5.50 for the year 1881–2. Orders should be made at once. The regular price of EDUCATION is $4. Vol. I, No. 2, is now ready for delivery. Now is the time to extend the circulation of our papers and magazines, and circulars will be sent to all who will express the want by postal.

— Mount Holyoke Sem. opens prosperously, with a large entering class. Miss Edwards and Miss Cowles are traveling in Europe, and hope to visit the Holy Land, as well as Constantinople, before their return.

THE SCHOOL COMMITTEE.

The past two years have brought to the front, in Massachusetts, a decided movement in favor of a general abridgement of the powers of the school committee. A people jealous of concentrated power and resisting every approach towards consolidation and supervision, usually end with the most vexatious form of local despotism. Nowhere has the protest against a thorough and enlightened supervision of public instruction been so obstinate and unreasoning as in the small townships of New-England. No responsible official outside Massachusetts has ventured to demand a departure from the good old way of handling the schools of a township, by a committee chosen in town meeting and intrusted with large powers in the expenditure of money and the general arrangements of the schools. Half-a-century ago this method of exclusive supervision by local authorities, generally non-experts, was probably the best. But to-day the country district schools of New England are suffering beyond description, in all their interests, for the lack of a general supervision which shall represent the State and see that the school laws are faithfully obeyed and the funds judiciously expended. The larger cities and many of the more flourishing villages of New England have adopted the true idea of superintendency by experts, and the superintendents are generally men of experience and character, open to modern ideas and on the look-out for the best things afloat for the children. Some of the more enterprising of the old townships aim at the same result, by giving the chairman or woman of the school committee, virtually, the powers of superintendency.

But there is yet a very large number of these townships in which the school committee has become, to all intents and purposes, a school "ring," which rules the educational affairs of the place in a spirit of petty tyranny and stolid self-sufficiency for which we look in vain elsewhere. If these little country townships who are resisting the wise policy of Secretary Dickinson, of Massachusetts, to establish some effective system of general supervision, would look into the doings of their own school committees, they would find ample reason for a revolt against a despotism more mischievous than is possible under the proposed reformed system.

It is true the separate members of these committees are chosen in open town meeting, and are supposed to be the servants of the people. But, during the past half-century, a set of official habits has grown up which, in many of these communities, operates as a practical denial of all save committeeman's rights in the premises. One of the most mischievous of these practices is the habit of dividing the schools, in their management, among the different members of the board; virtually giving to each member of a committee of three a sort of absolute power over the schools assigned to him. This power is too often used to fill the office of teacher with the most shameless favoritism; each member appointing from his own set of applicants, and all uniting for an obstinate defence of each other's prerogative. We could instance a case of this sort, in which an accomplished teacher of an important village school was dropped from the service, with no previous notice, at the motion of a new member of the committee to whom the school was assigned; the whole body refusing to give a reason for the act, and an almost unanimous petition of the parents for her reinstatement denied by the majority of the board, on the ground of obligation to sustain their colleague. In this way numbers of towns which have the right to superior schooling are still victimized by poor teachers fussing with obsolete methods; the whole machine run to gratify the petty ambition of a ring of small rural dignitaries. There are large regions of New England where normal graduates and new methods are in disrepute; where the school institute is looked upon as an impertinence; and nobody has a chance to teach unless the favored "sister, cousin, or aunt" of the committeeman who is the practical "boss" of his own little beat.

Anybody who has studied the social habits of this class of communities can easily understand how many an honored old township, still peopled with highly-intelligent families, is kept persistently walking the round of the public-school life of a generation ago, at the beck of a committee easily elected and then virtually responsible to nobody. It is this habitual abuse of power in the name of "liberty" that is slowly waking up the people of the States to the necessity of, at least, a joint supervision representing at once the interest of the Commonwealth in the administration of its school system and the real interest of the people and the children in a thorough method of education. Nowhere is there such an opportunity for the most vital school-keeping as in these beautiful old towns, each a sort of natural university where the children can be trained amid the most favorable influences. And nowhere is there a more lamentable waste of opportunity than in scores of these district schools, managed to please the school committee rather than to educate the pupils. Of course, the people are really responsible for this state of affairs. But it sometimes appears as if another Horace Mann must be raised up to break the spell which, like the bewitched atmosphere of the late "dark-day," broods over the educational interests of rural New England.

DRIFT.

— This week, Secretary Dickinson and his corps of "educational tramps,"—*vide* Gail Hamilton,—begin their annual autumnal journeying through the rural districts of Massachusetts, holding institutes of one and two days duration, supplemented with scientific and popular lectures. Probably not once in ten years does one of those little hill-townships enjoy an occasion which, even as an intellectual entertainment, can be mentioned alongside one of these institutes. Yet, this admirable system of popular instruction has fought its way to success against the persistent opposition of a considerable body of teachers, committeemen, and village oracles, who fear the encroachment of modern educational ideas on what they call the "independence of the instructor." Said "independence," reduced to its lowest terms, is usually found to be the obstinate conceit of an incompetent teacher or an ignorant committeeman to have his own way. It would be the wisest possible expenditure of public-school money in Massachusetts and New England, to keep on the stump a corps of the most eminent schoolmen, to wake up and inform the people of many of its remote districts, and release them from the slavery to the class of self-sufficient incompetents who now "sit down" on the children's souls and call it "keeping school."

— Some good people in Boston, during the past vacation, have done an excellent thing by gathering four hundred of the poorer children of the city, for one session a day, in one of the large public schoolhouses, for a vacation school. The teachers were all volunteers, and the school was conducted on a broader gauge than in term-time. Miss Piper gave three lessons a week, to several classes, according to the style of the Kitchen Garden, in various departments of household work. This experiment meets a real need in our cities. The long summer city-school vacation becomes an injury to thousands of children, a nuisance to the public, and a terrible oppression to the parents at the most oppressive season of the year. The man or woman who will organize some practical way of prying open the great doors of the thousands of Protestant churches and public schoolhouses that are shut through those months when Satan is especially active, and fill these special buildings, every day in the week, from the multitude of adults and children who must remain in town, for the general work of mental, social, and religious improvement, will become one of the benefactors of the national life.

— *The Nation*, from out the cloudy oracle, emits this ominous sentence: "*Every gift of the State to a college has been a fatal gift.*" When we reflect that without the early fostering care of Massachusetts and Connecticut, neither Harvard nor Yale would have outlived the ordinary diseases of American college childhood; that the whole collegiate and academical system of the Bay State was built up by the donations of the commonwealth; that the leading universities in the West and South are largely the offspring of State aid; and that the grant of lands in 1862 by the United States Government for agricultural and mechanical instruction dates the first general movement for industrial education in the country; this Delphic utterance, like many another from similar regions, remains a conundrum only to be guessed by the philosopher from whose "inner consciousness" it was evolved.

— It is to be hoped that the rumor that Wm. H. Vanderbilt has in mind the establishment of a university for girls at Nashville, Tenn., similar to the great institution founded by his father for young men, is true. It is said that Com. Vanderbilt, on his death-bed, declared that the $1,000,000 invested in Vanderbilt University had given him more comfort than any transaction of his life. Since his death, his son, now the wealthiest man in America, has made additional bequests to Vanderbilt University. If the present head of the family will establish a companion college, for girls, on the hills about Nashville, he will do the best possible thing for the higher education in the South and deserve the thanks of the whole American people.

EDUCATION AS SOCIAL SCIENCE.

[Mr. W. T. Harris, the chairman of the Department of Education in the American Social Science Association, in his opening address at the late meeting in Saratoga (Sept. 6.), spoke on "The Education of the Family and the Education of the School." The following is a brief abstract of his address:]

The Department of Education, in the Social Science Association, has to consider education in general, and not to limit its view to education in the school alone. It is an error, frequently made, to demand of the school all kinds of education,—education for trades and business, education in religion, education in politics and statesmanship, education in habits which the nurture of the family should supply.

Education, in the sense that social science uses the term, includes the whole life of man, in so far as the different institutions of human life react upon the individual and educate him. These institutions of civilization are the family, the social community, the State, the church. Each one of these gives a special kind of education to man which cannot be given by any of the others; all education seeks to make the mere individual the possessor of the fruits of the labors and experience of the human race. The church is the highest educational institution because it reveals the highest principle to man,—that of the creator of the world. In revealing this principle it reveals the origin and destiny of the world, of nature, and of the world of man. If our religion were Buddhism or Brahminism, for instance, instead of Christianity, we should believe in a God without any form whatever, not even the form of consciousness or personality. A world could not be a revelation of such a formless God. The human mind could not be in the image of a formless God. If God is not personal, an infinite reason, an absolute form, then man cannot be immortal, but must be destroyed, and lost when it returns to the first principle. Under such an education as a religion of Pantheism teaches, there can be only despotism in the State, slavery in the social community, and patriarchial rule in the family. But with the Christian ideal of a divine-human God there is all-hope for the individual man. Christian civilization professes toward the preservation and education of each individual. Each human being is an immortal soul infinitely precious to God, and institutions shall be established to reach out and bring within the influence of civilization all and each.

Next after the church, the education of the State is all-important. The influence of the form of government, its laws and the efficiency of their execution, have a most powerful effect in forming the character of each citizen. What can school education do toward making a man of the citizen who is born under the blight of absolute despotism? The education of the State dwarfs such an individual more than the school causes him to grow. But under a free government, where each citizen is permitted to assist in making the laws, the education is very powerful toward building up self-respect and strong individuality. The school is not chargeable with the corruption in politics, where the political machinery is so loose that it encourages demagoguery by permitting partisan success to follow as a result of bribery and fraud. Such a condition of things will corrupt the best young men who graduate from the school; the school is helpless against the temptation which is offered at the hand of the State.

Next in importance to the education of the State is that of the social community, or the business vocation of the individual. The business relation of man to his fellowmen continually educates the individual, and humanizes him or dehumanizes him, according as it is a rational employment or a brutish one.

The education of the family is of exceeding great importance. It furnishes the human being with his bundle of habits, his forms of behavior toward his superiors and equals; his habits of personal cleanliness, of proper dress, of proper eating and drinking, and, in short, of the general conduct of life. It gives the child the knowledge of his native tongue, ideas of right and wrong. All other institutions presuppose, in the child, that he has learned these great fundamental lessons from family nurture. If he has been so unfortunate as to have lost the priceless blessings of family nurture, the other institutions can make very little of him. The State will be unable to permit him to exercise his liberty, because he lacks the habits which make him a safe person; he has not put on the forms which are essential to the individual for life in a civilized community. The State confines him in a jail, therefore, because his period of nurture has been an education into hostility to social forms.

The social community with its industrial vocations cannot receive the child who lacks family nurture; for he lacks the sense of social propriety, has no respect for the rights of property, is not honest nor truthful, and has no instinct for industry. The beggar is the symbol of the destruction of the social community. Even the school cannot compensate for the lack of family nurture. It cannot deal with the child who does not know language, nor can it take time to teach him all the personal habits he should know.

The growth of a Christian civilization for two thousand years is marked all the way along by an increase in the power to reach and elevate the mere individual into the full enjoyment of the products of the labor and of the results of the experience of mankind. It enables the individual to participate through trade and commerce in the productions of every clime, and to share likewise in the wisdom collected by all mankind in all times and places. This principle has taken care of the well-being of the individual in the church, the State, the social community, the school.

The humblest individual is allowed, nay encouraged, to participate in the spiritual education of the church; the State has become democratic, and admits him to the privileges of self-government; the social community has emancipated him from serfdom, and permitted him to choose his vocation and thrive by it; the school has come to his very door, and offered to every child its initiation into the wisdom of the race. But this Christian principle has not done so much for the education in the family. It has not equalized conditions in the family to the extent that it has equalized conditions in the school, the social community, the State, and the church. In the family, poverty and wretchedness are allowed to tell on the nurture of the child, and sow in him evil seeds which will grow through all after-life, in spite of whatever the other institutions may do for him. The criminal parent may bring up his offspring to vice. The ignorant parent may bring up his children to manifold bad habits of person and conduct toward others, which will prove embarrassments in after-life.

It is now the most beneficent effort in society that seeks to remedy the condition of the poor and ignorant without depriving him of personal liberty. Social science teaches that the interest of the high and low in society is one interest. No village can be healthy with a pestilential marsh adjoining it. No family, however elevated by rank or wealth, can shut up itself within its palaces so securely that an ignorant and degraded population surrounding it will not create for it a pestilential atmosphere. The piece of carrion corrupts the air far and wide. Life is perpetual participation in the totality of one's conditions. It is a continual readjustment to one's environment. The interest of each is accordingly the interest of all. If we wish to attain well-being ourselves, we must see to the well-being of our neighbors.

Social science is gradually concentrating its attention on this most important matter of family nurture. The problem is, how to assist the family without destroying its sacred privileges of privacy and self-management; how to interfere without undermining individual freedom; how to increase self-help instead of diminishing it. The first successful move in this direction is the study of the conditions of hygiene and the provision for cleanliness, abundant pure air and pure water in the community. This is attended to by the department of health in our cities, — a recent institution, but one securing blessings to the family.

Efforts are now being made to improve the homes of the poor, . . to secure cleanliness, good ventilation, separate apartments for the members of the family, sufficient playground for children. These are great beginnings, but they are only beginnings, and are indirect contributions to the education of the family. The noble woman who, as secretary of this department of education, has inaugurated a system of inquiry into infant-growth and development (Mrs. Emily Talbot of Boston, is referred to), has undertaken an enterprise which promises very great effects in the direct promotion of the education of the family. She has devised a plan by which to interest the mother in her child's growth, and which will induce her to watch and record the steps of development in the unfolding of the faculties of the soul.

It does not so much matter what the statistics will show, as it does matter that the mother shall learn to study the growth of her child, and learn what constitutes a stage of progress, and how to discover and remove obstacles to this growth, as well as to afford judicious aid to the child's efforts at mastering the use of his faculties. One intelligent woman who is interested in this subject will kindle an interest which will spread throughout an entire town. The wisdom gained through these observations will extend gradually to all families, and will elevate the character of infant education incalculably.

When the mother becomes observant of the actions of the child as a matter of education, and when there comes to be a stock of generalized experiences on this subject, how much will be done toward correcting evil tendencies upon their first manifestation! It is a trite remark, that the shaping of a tree is an easy affair if undertaken while it is a sapling, but impossible after the tree has attained its growth. The education that goes on within the family is the object which now calls with most importunity on us for our attention as students of social science.

NEW PUBLICATIONS.

BARNES' NEW SERIES OF MATHEMATICS. — NATIONAL ARITHMETIC; ORAL AND WRITTEN. For Common and Graded Schools, Academies, etc. By Joseph Ficklin, Ph.D., professor of Mathematics and Astronomy in the University of the State of Missouri. Price, 75 cents. New York: A. S. Barnes & Co.

This new series of mathematics contains a *Table Book* and *Primary Arithmetic;* the *National Arithmetic*, in one volume, comprising two parts; *First Book, Practical*, 208 pages,—*Second Book, Advanced*, which are also published separately; and the *Elements of Algebra*, Keys to *National* and *Practical Arithmetics*, and to *Elements of Algebra*, are published in separate volumes for teachers. *The National Arithmetic* develops the subjects in their natural and logical order. The principles of each successive topic are presented by a series of graded exercises, which enables the pupil to grasp the relations of the whole subject as a unified whole. Nearly every topic in written arithmetic is introduced, and its principles illustrated by exercises in the oral arithmetic. This plan avoids the necessity for many *formal rules*, but *formulas* addressed to the eye as well as to the mind are made to take their place. The statement of principles definitions, rules, etc. is brief and simple. The illustrations and methods are explicit, direct, and practical. The great number and variety of examples embody the actual business of the day. Many improved *methods* are introduced, adapted to secure the rapidity and accuracy so desirable in business calculations.

The concise method of combining and treating Properties of Numbers, Multiplication and Division of Fractions, Interest and Proportion, the brief, simple, and greatly superior method of working Partial Payments by the "Time Table," and Cancellation, the free use of Equations, etc. will commend the book to practical teachers. The Metric System, Mensuration, and other more *theoretical* topics have been placed in the appendix, to be used at the option of student or teacher.

In fine, the *National Arithmetic* is suitable to the wants of the great mass of the pupils in our American common schools, and supplies the largest possible amount of information and training for the practical duties of life, in a short space of time. The book is well made,—paper, print, and binding are all of the best quality. We recommend school officers and teachers to examine this entire series of mathematics.

HENRY HOLT & CO'S PUBLICATIONS. — *English History for Young Folks*: B.C. 55—A.D. 1880. 16mo. Illustrated. By S. R. Gardiner. Price, $1.00.

This attractive and well-written book presents the story of England's history for the young, from the period of the early Britons to the present time. Important periods of this history, when events of great significance occurred, are presented with considerable detail; and the style chosen is admirably calculated to awaken an interest in the minds of the children which will make them long for more extended historical reading. Wisely most of the dates are omitted, and the memory is not burdened with non-essentials. Its arrangement, by topics, with full-faced type, is a feature worthy of special commendation. The illustrations and maps are not only attractive, but very useful in a book of this character. As a book for the American school, it has many things to commend it. The author has studied the art of condensation, and conciseness of expression, without destroying the interest of the narrative, and shows the good results in the excellence of this work. It is beautifully printed and substantially bound.

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Botany. Outlines of Morphology, Physiology, and Classification of Plants. By William Ramsay McNab, M.D., F.L.S., Professor of Botany, Royal College of Science for Ireland, Dublin. Specially revised for America by C. E. Bessey, M.Sc., Ph.D., professor in the Iowa Agricultural College. Price, $1.00.

This work belongs to Messrs. Holt & Co.'s admirable series of *Hand-books for Students and General Readers*, in science, literature, art, and history. The American edition of this work is combined in the compass of *one* volume, instead of *two*,—(*Morphology and Physiology, and Classification of Plants*),—as in the original English edition. This most desirable result has been accomplished by condensing and simplifying the text,—by the omission of much that was strictly technical; by the substitution of American for European examples when possible, and the better distribution of the illustrations. Part I. treats of the Morphology of Plants,—the cell, the tissue, the external conformation, and the physiology of plants, of nutrition, the general conditions of life, growth, the movements of variation, reproduction, and a final chapter on the classification of the vegetable kingdom. Part II. is devoted to Special Morphology, and Outlines of Classification of Plants. The convenience of the student has been partly increased by the division of the chapters into sections, and of the sections of the text into numbered paragraphs. We heartily desire that a much larger number of our common schools should introduce the study of botany. What is needed is that the vegetable world should be studied with reference to its value as a part of the endowment made to mankind. Plants are living and useful things, and serve other purposes than for specimens for mere analysis and classification. This book will help on the right methods.

SPIRITUAL SONGS FOR THE SUNDAY-SCHOOL. By Rev. Charles S. Robinson, D.D., author of *Songs for the Sanctuary*, etc. New York: The Century Co.

Of this new singing-book 100,000 copies have already been printed. It contains 273 hymns; 221 tunes and chants. Nearly 150 hymn-writers and 90 music composers are represented in this work. This volume is the latest addition to a series which already includes two of the most popular hymn and tune books published in America,—*Spiritual Songs for Church and Choir* and *Spiritual Songs for Social Worship*, the three constituting the "Spiritual Songs Series." We are glad to notice the decided tendency toward a higher class of hymns and tunes, which will equally interest the young in our Sunday-schools, and at the same time cultivate their taste in the direction of that which is purer in poetry and music. The hymns are of the very best character, and the tunes are excellent. The use of this book will do much toward elevating the character of the Sunday-school in its musical department.

HOMOSELLE. Price, $1.00. Boston: James R. Osgood & Co.

This is the fifth volume of the new "Round-Robin Series," and like those that have preceded, it will be popular. It is a story of Virginia life, prior to the civil war. The plot is well planned, and deals with the conditions of society in the Old Dominion, as found at that time, presenting the incidents of farm-life, and introducing characters such as were common in that great State. The chief results cluster around a slave insurrection, and are full of stirring scenes. The book becomes in part history, as well as interesting narrative, and the pictures of the olden-time in Virginia will be recognized by those who knew its proud "first families," and the influences that went out from them. The mechanical execution of the series reflects credit upon the enterprising publishers.

ENGLAND WITHOUT AND WITHIN. By Richard Grant White. Price, $2.00. Boston: Houghton, Mifflin & Co.

Some of the interesting chapters of this book have appeared in the *Atlantic Monthly*. They were prepared for the book, and published, in part, serially. They present English life and character from the standpoint of one who was possessed of a strong feeling of interest and affection for the "Old Home" of the Yankee Fathers. After giving an interesting introductory chapter, Mr. White writes pleasantly of English skies, of English railways, of the London streets, of life in London, of a day at Windsor, of rural England, of English men and women, of English manners and life; and of his visit to the Universities of Oxford, Cambridge, Stratford-on-Avon, and Central England. It is a book the general reader will enjoy exceedingly, as it presents lucidly the important features of England and English life with great clearness, conveying a vast amount of valuable information It is a book of observation, of study, of reflection; and while it is written with that charm of style which makes all of Mr. White's works so readable, and thus will attract the attention of those who seek merely to be entertained, those who wish a book of positive value and fresh suggestions in regard to England and its diversified literary and social customs and interests, will find this book peculiarly satisfactory.

HARPER'S PUBLICATIONS. *That Beautiful Wretch.* A Brighton Story. By William Black, author of *Sunrise, Macleod of Dare*, etc. Illustrated. New York: Harper & Brothers. For sale by A. Williams & Co., Boston.

Like all of Mr. Black's novels it has strong elements of popularity, and when presented in the beautiful dress of this illustrated volume, lovers of exciting fiction will find delight in *The Beautiful Wretch.*

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Toby Tyler; or, Ten Weeks with a Circus. By James Otis. Illustrated.

This is a juvenile book which will win the attention of boys. Independent of the thrilling story, the cover of the book is so striking that the young could not pass it by. The ground is fawn-colored; across the center comes a red chariot drawn by gold horses; a red-faced clown looks through a hoop in one corner, and Toby Tyler looks up from another, while on the back Mr. Stubbs, a red monkey, peeps out from behind black bars. We can almost see the boys exulting over it.

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— Among the later "Franklin Square Library" issues are *The Black Speck*, by F. W. Robinson, a temperance tale, well told and affecting in its incidents; and *Reseda*, a novel, by Mrs. Randolph,—a good delineation of English social life, in the interior of the island, with a pleasant love-story interwoven.

"ONE OF THREE," AND MADE OR MARRED. (Novels.) By Jessie Fothergill. Price, $1.00. New York: Henry Holt & Co.

This is number 129 of the popular "Leisure Hour Series" Each of the stories are characteristic of the author, although they differ materially in style,—and both are interesting. Prefixed to "One of Three" is the following "Parable," which will indicate to the reader the general idea of the story: "Here are three breast-knots," said a wise man to a maiden who was passing his hut. "Choose quickly which you will wear through life." The maiden looked at the knots, and took one of them. "I will keep this and wear it," she said. "Why that?" asked the sage. "True, it is not the worst. This tinsel affair would have given you no satisfaction; but it is not the best. This with the tiny diamond in its folds is the best. The one you have chosen has but a little steel button with a sharp point; sometimes you will hurt yourself with it. Take rather the third,—this with the diamond." "I will have this," said the girl, clinging to her first choice. "But why?" "Because I like it the best." "Why so?" "Because I do," answered the maiden, pluning the knot on her breast, and going away singing. The sage, with a cynical smile, withdrew into his hut. "Always the same old tale," he muttered. "With man and maid alike, 'I like it best.' 'And why?' 'Because I do!' It grows monotonous."

LITERARY NOTES.

— *Harper's Weekly*, for October, will contain the first of a series of papers by Joseph Hatton, on "Journalistic London," illustrated by views and portraits.

— The retail price of *Pinnock's Goldsmith's History of England*, published by Charles DeSilver & Sons, Philadelphia, is $1.60 instead of $1.75, as stated in THE JOURNAL of Sept. 1.

— G. P. Putnam's Sons issue for the fall trade,—In Science and Education: *The First Book of Knowledge*, by Frederick Guthrie; *Animal Physiology for Schools*, by J. Milner Fothergill, M.D.; *Suicide: Studies on its Philosophy, Causes and Prevention*, by James J. O'Dea, M.D.; *Sensation and Pain*, by C. Fayette Taylor; and revised and enlarged editions of President Bascom's *Æsthetics* and *Rhetoric*.

— Among elegant volumes for the approaching holiday season, S. C. Griggs & Co., Chicago, announce two for issue in October. One is *Lyrics of Home-Land*, a new collection of poems by Eugene J. Hall, already widely and popularly known as a writer of felicitous verse. Many of them are in the quaint dialect of New England, and abound in homely, good-natured wit and humor. The volume will contain nearly fifty appropriate illustrations, and will be printed and bound in uniform style with *Songs of Yesterday*, by Benj. F. Taylor, many of whose poems have already grown to be classics, and of which a new edition will be ready about the same time. The other is *Sparks from a Geologist's Hammer*, by Alexander Winchell, LL.D., author of *Pre-Adamites*, and professor of Geology and Paleontology in the University of Michigan. It is a collection of more or less connected papers on scientific and semi-scientific themes. The authorship is a guarantee of learning and an entertaining style combined.

— Henry Holt & Co.'s fall announcements include *Greece and Rome; Their Life and Art*, by Jacob von Falcke. This is a very beautiful and important illustrated work, which they will publish for the holidays. Its numerous portraits of interesting objects, and pictorial "restorations" of places and occurrences in Athens, Rome, and Olympia, are believed to surpass in interest and artistic merit anything of the kind heretofore published. *The Young Folks' History of the War of the Union*, by John D. Champlin, Jr., author of the *Young Folks' Cyclopædias*, etc. *Our Familiar Songs, and those who Made Them*, more than three hundred standard songs of the English-speaking race, arranged with piano accompaniment, and preceded by sketches of the writers, and histories of the songs. Gardiner and Mullinger's *English History for Students*, Gardiner's *Introduction to English History*, and *English History for Young Folks*. J. A. Symonds's *Renaissance in Italy*, Parts II. and III. The *Reign of Learning and the Age of Despots*. Baring Gould's *Germany Present and Past;* Ten-Briuks *History of English Literature;* Cox's *Introduction to the Sciences of Comparative Mythology*, and *Folk Lore*. In the "Leisure Hour Series," Mrs. Alexander's *The Freres*, Fothergill's *Kith and Kin*, and Hardy's *Laodicæ*. The Geometry and Trigonometry in Professor Newcomb's Mathematical Series, and Professor Stern's *Studien and Plaudereien (Im Vaterland)* second series.

— Charles Scribner's Sons republish *The Law of Love, and Love as a Law*, President Hopkins's work on Moral Science, in a new edition, which has been in part rewritten in order to bring it into closer relation to his *Outline Study of Man*, of which work it is really a continuation. More prominence has been given to the idea of Rights, but the fundamental doctrines of the treatise have not been changed. The very interesting correspondence with Dr. McCosh is retained.

They also publish *Merrill's East of the Jordan*. In 1874 Mr. Selah Merrill was appointed archæologist of the American Palestine Exploration Society, and the next year he was placed in charge of the exploration work. During the two following years he made four different expeditions, of two of which a detailed account is given in this work. In the work of exploration which has now begun, the author of *East of the Jordan* has done conspicuous service. As archæologist of the American Exploration Society, his opportunities were exceptionally good, and were well improved; and in dealing with the Bedaween his admirable tact not only preserved him from molestation, but availed to secure faithful and valuable aid from these children of the desert. His volume is a record of travel and observation in the countries of Moab, Gilead, and Bashan, and is written in a popular form, giving interesting incidents of travels and personal experiences from day to day. No other American is so much at home in the East Jordan country as Mr. Merrill, and there does not exist in any other language so much fresh and valuable information respecting it. The illustrations which embellish the book are fresh and original, and the style of the narrative is graphic and entertaining.

MATHEMATICS.

All communications intended for this department should be directed to the Editor, Prof. E. T. QUIMBY, *Hanover, N. H.*

Mr. Editor :—Prob. 161, of Feb. last, virtually relates to the propriety of the elimination in the case of

$$[1-\sqrt{(-3)^2}]=1-3\sqrt{(-3)}-9+3\sqrt{(-3)} \quad (1);$$

or whether

$$\sqrt{(-3)}+\sqrt{(-3)}+\sqrt{(-3)}=\sqrt{(-3)}\times\sqrt{(-3)}\times\sqrt{(-3)}, \quad (2).$$

I say, No; and I give as the reason, that the quantities compared are of *different constitution*. But I say, further, that it is allowable to make

$$3\sqrt{(-3)}-3\sqrt{(-3)}=0\sqrt{(-3)}, \text{ or } 0\sqrt{(-1)} \quad (3);$$

but not to assume that

$$0=0\sqrt{-1} \quad . \quad . \quad . \quad . \quad (4),$$

which the proposed elimination does assume. Indeed, the symbol $\sqrt{-1}$, as a factor of any quantity, shows that such quantity is not real, and if involved among real quantities pertinent to an investigation, will lead to an absurdity. Does this not equally show that when it is associated with zero, such zero will turn out to be a false one?

The question whether $(-8)^{\frac{1}{3}}$ has more than one value, is not the true issue, but whether $[0\sqrt{(-1)}-8]^{\frac{1}{3}}$ has. If we assume the truth of (2), and are brought up with a round turn in an absurdity, what is the lesson but that the assumption was false?

If we take the general form $[a-\sqrt{(-x)}]^n$, and develop it, all the alternate terms, commencing with the second, will have the factor $\sqrt{(-x)}$, and the sum of all these terms will take the simple nature of $\pm m\sqrt{(-x)}$; and it is quite probable that many selections of related values among a, n, and x would render m a zero; a given number, or imaginary, or zero it would always be. Then in the cases of $m=0$, can we therefore infer that $[a'-\sqrt{(-x')^{n'}}$ is a real quantity, where the accents are the discovered relative values of a, x, and n? but if $a'=1$, $x'=3$, and $n'=3$, those persons do so allege who are confronted in Prob. 161 with $12=0$. But whether m be a zero or not, it will ever be clogged with the warning factor $\sqrt{(-1)}$. Why should this warning factor be preserved in all other values of m than 0, and not when m is 0?

We are not now in simple arithmetic, but approaching the higher analysis, using the *language of indication*.

New Bedford, Mass. J. SPARE, A.M., M.D.

[This is an ingenious explanation of Prob. 161, but it lacks mathematical accuracy. In the first place, there is nothing in 161 which assumes

$$\sqrt{(-3)}+\sqrt{(-3)}+\sqrt{(-3)}=\sqrt{(-3)}\times\sqrt{(-3)}\times\sqrt{(-3)}.$$

This is not true, but

$$\sqrt{(-3)}+\sqrt{(-3)}+\sqrt{(-3)}=-\sqrt{(-3)}\times-\sqrt{(-3)}\times-\sqrt{(-3)},$$

is true. Furthermore, there is no mathematical reason why $0\sqrt{-3}$ should not be dropped as well as $0\sqrt{3}$. If $+\sqrt{-3}$ and $-\sqrt{-3}$ in the same polynomial do not cancel each other, then all rules for algebraic addition must be revised. The simple explanation of the fallacy in 161 is this: The assumption $(-8)^{\frac{1}{3}}=-2$ is false, and therefore it gives a false conclusion. The truth is, $(-8)^{\frac{1}{3}}=1-\sqrt{-3}$. This is easily shown by cubing -2. $(-2)^3=-^32^3=----8$. Now, $----8$ or $-^38=-8$, but $(-^38)^{\frac{1}{3}}$ does not equal $(-8)^{\frac{1}{3}}$. For a full explanation of this see *Collegiate Algebra*, published by Clark & Maynard, New York, pages 25 and 113 to 120,—ED.]

SPECIAL CORRESPONDENCE.

DELAWARE.

The Wilmington Conference Academy, located at Dover, Del., is an institution which occupies a notable position among the educational forces of that State. The system of public instruction in Del. is very incomplete, notwithstanding the careful labor of State Supt. Grover, who, with his recently appointed assistant, has a tedious and discouraging task to provide and supervise an adequate system of common schools, to say nothing of the higher secondary instruction. I believe that outside of the city of Wilmington, which has a distinct educational management, there is but one public school which attempts any measure of secondary instruction, properly so called.

Among the private and corporate schools, the Conference Academy holds a high position. From its relation to the public schools it is greatly hampered by the two evils which always prevail where school gradation are imperfectly accommodated to one another. These hindrances are the imperfect or peculiar nature of the preparation of the applicants for admission; and the necessity of yielding somewhat to the frequent demand for rapid progress, and courses of study extended beyond the proper sphere of secondary grades. But it is to the credit of the energetic principal, Mr. R. H. Skinner, that he exercises great care to obviate as far as possible these difficulties, and to properly coördinate all departments of the school.

The buildings and grounds are new, well located, and carefully kept, and the charges for the student very moderate. The library and scientific collections are of recent growth, and the progress has been from small beginnings. Both teachers and scholars, however, manifest a lively interest in these departments, so that through hearty coöperation in effort, a library, herbarium, and reading-room are now in a very satisfactory condition, and their use enjoyed with a greater zest from the mutual feeling of personal ownership. The school is coëducational, but the ladies are treated with a freedom and respect both by instructors and fellow-students which are worthy of all commendation, and which here, as elsewhere, utter a severe reproach to the cloister-life which many self-sufficient educators deem indispensable to female education. But in one particular this school is a model for all, wherever located and of whatever grade, and that is in the attention paid to the choice of teachers. A corps of eight teachers, and all of them professional instructors, ought to make the Wilmington Conference Academy an educational center for the State. All that the school seems now to need, in order to the highest success, is intelligent sympathy and hearty coöperation in its work.

The residents of Delaware and all visiting friends of education will do well to accept the cordial invitation of the Principal and call in person, that they may see for themselves what an educational work is being done in their midst, and if possible become participants in the earnest spirit of the teachers, who are one and all striving for the truest secondary education of the youth of Delaware. E. M. W.

NEW-ENGLAND DEPARTMENT.

MAINE.

State Editor, N. A. LUCE, *Augusta, Me.*

— Teachers' institutes of two days each will be held during Oct. and Nov. as follows: At Ellsworth, Sept. 30 and Oct. 1; Cherryfield, Oct. 4 and 5; Pembroke, Oct. 7 and 8; Orono, Oct. 18 and 19; Houlton, Yarmouth, and Turner, Oct. 21 and 22; Presque Isle, Oct. 25 and 26; Fort Kent, Kennebunk, and North Anson, Oct. 28 and 29; Norway, Nov. 4 and 5; Fryeburg, Bowdoinham, and Damariscotta, Nov. 8 and 9; Rockland, Belfast, and Monmouth, Nov. 11 and 12; Foxcroft, Nov. 15 and 16; Pittsfield, Nov. 18 and 19; Farmington, Nov. 25 and 26.

— The Eastern State Normal School, at Castine, commences its fifteenth year with an attendance of 98, 35 of whom are in the class entering this term. The different portions of the State are represented as follows: Waldo 24, Hancock 19, Penobscot 17, Knox 14, Washington 10, Lincoln 7, Kennebec 2, Piscataquis 2, Somerset 2, and Cumberland 1.

— The fall term of the seminary and college at Kent's Hill opened with 180 students. The new Profs., Strong and Trefethen, are winning golden opinions. Dr. Torsey is in the thirty-fifth year of his presidency of the institution, and in better health than for many previous years.

— Miss Eliza J. Perley, late preceptress of Kent's Hill, Miss Annie M. Pinkham, a graduate of the advanced course at Farmington, and Alice E. Warren, of the class of 1880, have been appointed teachers in the Normal School at Farmington.

NEW HAMPSHIRE.

State Editor, D. A. CLIFFORD, *Manchester, N. H.*

— The governor of this State having appointed Friday, the 9th inst., as a day of prayer for the recovery of the President, the schools of Manchester were closed during the forenoon by order of the mayor, H. B. Putnam. The French Catholics of the city have just started several parochial schools, thereby withdrawing four or five hundred children from the public schools and streets.

VERMONT.

State Editor, C. C. BOYNTON, *Townshend, Vt.*

— St. Johnsbury Acad. opens with 245 students; Ludlow Acad. with 104; Leland and Gray Sem., at Townshend, with 93; Beeman Acad., at New Haven, with 80; State Normal school, at Castleton, with over 70; Vermont Acad., at Saxton's River, has more than ever before, which is also true of Ludlow Acad., above named. The attendance at Leland & Gray is larger than before during the present principalship (six years), or for a long period previous. In the St. Johnsbury Acad. a large number of the accessions are to the advanced classes. Miss Abby F. Mitchell of Bath, Me., for the last four years a teacher in the Springfield (Mass.) High School, has the work of History and English; and Mr. John Barstow, of Dartmouth Coll., is temporary assistant.

— In the Normal School at Castleton, Miss Taylor, one of the board of teachers, is a daughter of Judge Taylor of the Rutland county court. She was educated at the Randolph Normal School, from which she graduated and in which she was an instructor.

— State Supt. Dartt has just held educational meetings at Huntington, West Bolton, Underhill, and Jericho. He was assisted by Rev. J. W. Emerson, Prof. Cilley, and Miss Guernsey. Good meetings, though the attendance was small. Mr. D. is doing admirably.

— The Randolph Normal School has an attendance of 160 students, an increase of about twenty-five over one year ago, and with but one exception,—the fall of 1870,—the largest number in the history of the school. The attendance at that time,—167,—bids fair to be exceeded in the course of the fall.

— The fall term of Chelsea Acad. was opened Aug. 30, under the direction of Elbridge W. Goodhue of Vershire.

— John M. Comstock, former prin. of Chelsea Acad., was married Aug. 24, to Miss Persis S. Dearborn.

— The number of students at the Waterbury Sem. is increasing daily. They now number about seventy, and more are expected. The commercial department has three full classes, and expects to graduate one class this term. Students can hardly fail of doing good work in this department, with so competent an instructor as Prof. Marsh.

— Harmon B. Docke teaches the Corinth Acad., commencing Sept. 5.

— Thetford Acad. opened on Monday, Aug. 29, with a fair show of scholars. Charles, son of David Turner, has taken his father's place as prin., on account of his father's illness.

Bradford Acad. opens with 121 pupils. Fifty pay tuition.

MASSACHUSETTS.

State Editor, ALFRED BUNKER, *Boston (Highlands), Mass.*

— The first annual report of the New-England Industrial School for Deaf Mutes, at Beverly, has been issued. There was received last year $2,445.63, and expended $2,359.59. Mr. William B. Swett, the supt., reports that the school is in good condition and has done much for the education and general benefit of some twenty-two inmates since the opening in February, 1880. Current expenses are paid from public donations, and it is hoped that a small mortgage on the home may soon be raised.

— Mr. Geo. F. Mills, classical teacher at Greylock Institute, So. Williamstown, has gone to Europe with his family, for a year of study and travel. Prof. Saml. V. Cole, late instructor in Latin, Bowdoin Coll., will supply the place during his absence.

— Miss Phebe W. Bunker, lately of Auburndale, has been appointed house-matron in Bradford Acad., Bradford.

— At Williston Sem., at Easthampton, the following appointments of new teachers have been made: Mr. J. W. Seaver, a graduate of Williston and Yale Coll., and for the last two years teacher in a boys' school at Scranton, Pa., takes the department of elocution and physical culture; Mr. C. M. Demond, a graduate of the Roxbury Latin school and valedictorian of the last class at Williams, will be teacher of modern languages; and Mr. Nathan A. Cobb, a graduate of the Worcester Free Inst., and for two years a teacher in the Spencer schools, takes the department of chemistry and drawing.

— Mr. Heber D. Bowker has been appointed prin. of Groveland High School.

— Mr. Wilbur F. Nichols, of Belchertown (Amherst '80), has been appointed prin. of the Florence High and Grammar School. Salary, $800.

— Smith Acad., Hatfield, opened on the 31st ult., under the new prin., Miss Anna H. Billings.

— Mr. Robt. W. Willson, of Salem, has resigned his position of tutor in Physics at Harvard, and accepted the appointment of Assist. Astronomer at Yale. He was at one time Assist. Astronomer at Cordoba, Argentine Republic, and afterward held a similar position at the Cambridge observatory.

— Mr. C. S. Palmer, lately prin. of the Florence High School, Northampton, has been appointed prin. of the High School at North Andover, with a salary of $1200.

— Mr. Geo. H Cummings (Amherst, '80) is to have charge of the North Brookfield High School.

— Eight years ago Harvard's endowments earned 8½ per cent.; now they earn only 5½ per cent. The loss of 3 per cent. on $4,000,000 is $120,000; quite an item in making up the yearly balance sheet.

— The Teachers' Inst. held at North Adams last week was one of the most practical educational meetings ever held in Berkshire Co. An institute will be held at Pepperell next week, Thursday and Friday, 22d and 23d insts.

— The fall term of Williams Coll. began with a fresh class of eighty members, among them being the two sons of Pres. Garfield and the son of Col. Rockwell. Several changes have been made in the faculty. Prof. Mears succeeds Prof. Southworth in chemistry; Bliss Perry, who graduated from Williams in the last class, is instructor in oratory; Prof. R. A. Rice takes the chair of modern languages; Prof. A. M. Gould is the instructor in Latin, and Prof. Smith acts as an assistant. Prof. Franklin Carter begins his presidential administration here with the opening of this term. The work on Clark Hall, the stone fire-proof building which is to contain the natural history and mineralogical collection of the college, has been seriously delayed, owing to a difficulty in quarrying the stone. Work has now been commenced on the second story, and the building will be finished in about four weeks.

RHODE ISLAND.

State Editor, I. O. WINSLOW, *Providence, R. I.*

— Mowry & Goff's English and Classical School opens with 200 pupils, the largest attendance ever registered.

— Kingston proposes a $2,400 school-house. J. H. Tefft is chairman of the building committee, a guarantee of a proper structure. A lot worth $600 has been donated.

— The Messrs. Lyon, associate principals of the Univ. Grammar School, Providence, arrived in Boston on the "Atlas," Sept. 16, after a rough and stormy passage. They have

returned from their European tour, with renewed vigor for work, and equipped with larger facilities to do excellent service for their boys, whose scholarship and training have always exhibited good instruction and discipline. In Great Britain they visited Oxford and Cambridge, and the great schools of England, — Harrow, Christ's Hospital School, Eaton, and Rugby. The journey was in every respect pleasant and successful.

— The Providence *Press* says that Prof. Geo. L. Vose, who has been connected with Bowdoin Coll., Brunswick, Me., and has accepted the professorship of Civil and Typographical Engineering in the Mass. Inst. of Tech., is a native of Pawtucket, and a graduate of Brown Univ. He was a poor boy, and one of the pupils who sat under the fear of Joseph Watts "four-legged doctor," when Mr. Watt's was teacher of the grammar school on Munch Hill. George was always "right smart" at figures, and the prediction was made that he would be heard from.

CONNECTICUT.

State Editor, CHARLES NORTHEND, *New Britain, Conn.*

— Most of the schools of the State commenced their autumn term in the first or second week of Sept., and these two weeks have proved the most oppressive weeks of the year; and, if we mistake not, the same has been true of the early weeks in Sept. for two or three years previous to this. With these facts in view, may it not be better hereafter to continue the spring term till nearly the middle of July, and defer the opening of the autumn term till about the middle of Sept.? Or if this is not done, we would suggest that the daily sessions during the heated term be reduced one-third, and that the lessons be made less difficult than usual, so that both teachers and pupils may feel a degree of relief from burdensome effort until the oppressive heat of summer has fairly passed away.

— The schools in the pleasant village or borough of Danbury are to continue under the supervision of Mr. Mortimer A. Warren, a gentleman well qualified for the position by education and experience, no less than by the deep interest he feels in school work. We trust that the school interests of Danbury, which for many years have had good men at their head, may make still higher attainments under Mr. Warren's direction.

— Prof. Hitchcock, who for the last two or three years has been principal of the high school at Thompsonville, will continue at its head for the coming year. Prof. H. is a good teacher and an active friend of education. He is doing a good work in Thompsonville, and we are glad to know that his services are appreciated.

— The schools in Waterbury are progressing very satisfactorily under the judicious management of Supt. Crosby, who has for nearly ten years, been doing a good work here. Having had a large experience in teaching, and being possessed of wise views on educational matters, his influence for good is more and more felt in that community. To accommodate the increasing want of the city, two or three new school-houses are in process of erection and nearly completed. We are glad to learn that all the rooms in the new buildings are to be furnished with single desks. This is as it should be. We are also glad to learn that the Board of Ed. has voted to limit the number to fifty under any one teacher. This is a step in the right direction, only not far enough. We cannot expect the highest and best results until the number of pupils to a teacher is limited to thirty. When this shall be done we may reasonably expect that the teacher's influence in many particulars will be felt by every pupil under her care. But when sixty or seventy children are crowded into one room and under the care of one teacher, there can be but little individual influence. To show how largely teaching in our schools is falling to the lot of ladies, it may be stated that of the 46 teachers in the schools of Waterbury, 43 are ladies.

— Mr. E. F. Sawyer, son of Prof. Sawyer of the State Normal School, has accepted a position of music teacher in the public schools of Bradford, Pa. Mr. Sawyer has spent about two years in Boston in qualifying himself for his vocation, and we wish him abundant success in his new position.

— Connecticut loses another friend of popular education, in the recent death of Hon. Loren P. Waldo of Hartford.

EDUCATIONAL INTELLIGENCE.

NINTH CONGRESS OF WOMEN.

The Association for the Advancement of Women will hold their ninth congress at Buffalo, N. Y., Oct. 19, 20, and 21, at St. James Hall, corner of Eagle and Washington streets.

These meetings were originally devised in order to supply a need long felt and recognized,—the need of more extended intercourse and better acquaintance among the women who are at once best able and most desirous to enlarge the opportunities of their sex, and to raise the standard of its hopes and attainments. The coming together, from a vast and varied extent of country, of women devoted to these objects cannot fail to do much in removing the limits and barriers of local prejudice and in bringing the best knowledge of each within the reach of all.

As years roll on, the accumulation of experience makes it more and more possible for women to learn how they can best help each other. Every good undertaking, moreover, opens the way for some good work. The valued record of our past meetings leads us to hope that in the future their usefulness may be increased rather than diminished; and that we, working in our day and generation, may leave behind results which will be helpful to generations yet to come.

The following topics are for discussion: Scientific Openings for Women; by Miss Mary Watson Whitney, N. Y. Outdoor Occupations: Sericulture; by Mrs. Caroline M. Severance. Factory Girls; by Mrs. Elizabeth B. Chace, R. I. Position, Occupation, and Culture of Indian Women. by Miss Susette La Flesche, Neb. Influence of Foreign Study on American Girls; by Mrs. Lucinda H. Stone, Mich. Political Education of Women; by Miss Mary F. Eastman, Mass. Guardianship of Children: Status of the Mother; by Mrs. Belva A. Lockwood, D. C. Work of Women in the Reforms of the past Century; by Mrs. Lois G. Hufford, Ind. Temperance; by Rev. Antoinette Brown Blackwell, N. J. Rescue Work; by Dr. Elizabeth Blackwell, Eng. The Ideal Home; by Mrs. Ednah D. Cheney, Mass. The Pursuit of Art; by Mrs. Sarah W. Whitman, Mass.

CALIFORNIA.—This State spends $3,000,000 a year on her schools. She has school property to the value of $7,000,000, and yet there are but 100,000 attendants out of 150,000 who are of school age. The San Francisco Board of Ed. estimated the expenses of the school department for the coming year at $821,000. The Board of Supvrs. reduced the estimate to $650,000. The Board of Ed. has protested that the schools cannot be properly conducted with this sum, and if the mayor and supervisors refuse to increase it somewhat, a mandamus is to be directed against them, forcing them to show cause why the appropriation has been reduced.

DISTRICT OF COLUMBIA.—Prof. Julius E. Hilgard has been selected to succeed the late Capt. Carlile Patterson as Supt. of the Coast Survey. Prof. Hilgard has been connected with the Coast Survey for 36 years, during 19 of which he has been in charge of the Coast Survey office and of the construction of standard weights and measures. His rank among the scientific men of the country is sufficiently indicated by the fact that he was elected in 1874 to be president of the American Assoc. for the Advancement of Science, and has been for nearly twenty years a member of the Nat. Acad. of Sciences. His scientific work is recorded for the most part in the reports of the Coast Survey, to the success of which he has so largely contributed. His selection as Supt. has been fairly earned by a life-time of thorough and unselfish work for the sake of science.

GEORGIA.—The Univ. of Georgia has 1,279 matriculates. Only 30 students pay tuition at present, and the Board of Visitors, in their annual report, recommend that all charges should be abolished, and tuition be

NEW BOOKS RECEIVED.

F. S. L.: *With Costs;* A novel; by Mrs. Newman.... *Ralph Waldo Emerson: Philosopher and Poet;* by Alfred H. Guernsey. Appleton's new Hand-volume Series. ... *Wit and Wisdom of Benj. Disraeli, Earl of Beaconsfield;* cl. New York: D. Appleton & Co.

Am. Version of the Revised New Testament (second ed.), with the Readings and Renderings preferred by the Am. Committee of Revision; incorporated into the text by Roswell D. Hitchcock, D.D.; cl., red edges; $1.00. New York: Fords, Howard & Hulbert.

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Illinois State Editor, J. N. WILKINSON, *Decatur, Ill.*

ILLINOIS.—Mr. Edward Cook, a gentleman long and favorably known in connection with the book business of the Northwest, has become a partner of the firm of Jansen, McClurg & Co. Mr. Cook's connection with the business commenced in 1859. During the last thirteen years he has been the general western agent and representative of Ivison, Blakeman, Taylor & Co., the prominent school-book publishers. His long experience in the various departments of the trade, and his wide acquaintance with dealers and educators, will fit him to aid in carrying on and developing the large and rapidly-increasing trade of this great publishing-house.

Here are some of the new locations of Illinois school principals: Abingdon, W. D. Eastman; Arthur, B. F. McClelland; Arcola, T. C. Clendenen; Astoria, John H. Tear; South Belvidere, Elmer E. Brown; Bement, I. N. Wade; Blue Island, J. W. Troger; Brighton, Prof. Hill; Buda, N. Edgar Hawes; Bushnell, Jno. P. Yoder; Carbondale, Prof. Stotler; Cerro Gordo, B. F. Stocks; Elmwood, T. B. Bird; Farmer City, Allen S. Stults; Galena, R. L. Barton; Gibson City, C. M. Kingsley; Harvard, Miss C. G. Haynor; Hennepin, G. F. Miner; Hillsborough, J. F. Gowdy; Hinsdale, E. L. Harpham; Hoopeston, Walker Bird; Ipava, Prof. Rice; Lewistown, E. R. Boyer; Lexington, Geo. A. Sterling; Lovington, Alonzo Meacham; Malden, Mr. Finn; Manchester, A. R. Volley; Mansfield, Geo. W. Snapp; Marine, Arthur Oehler; Maquon, Theo. Axline; Meredosia, T. L. Fausler; Metamora (West), J. H. Morse; Metropolis City, E. S. Clark; Millersburg, Dan'l Farmer; Milton, Dr. A. G. Lucas; Mowequa, Mr. Rarer; Minier, T. C. Williams; Murphysboro, Prof. Kimmell; Naples, J. S. Griffin; Newman, Theo. Haney; Nora, F. M. Tyrrell: Paxton, W. A. Wetsell; Perry, C. I. Swan; Richmond, J. P. Fisk; Mt. Morris, E. A. Berry; Rossville, W. H. Chamberlin; Savanna, Geo. C. Mastin; Shannon, Dr. Ely; Sheridan, Marion McKay; Tolono, P. K. McMinn; Tuscola, F. A. E. Starr; Wataga, Miss Summers; Watseka, Henry Rullson; Waverly, J. R. Harker; Woodstock, J. B. Estee; Wyoming (N.), Frank Wilson. The vacancies are not yet all filled.

MICHIGAN.—The following are some statistics of the graded schools of this State for the year 1880: Number of children between 5 and 20 years of age, 213,712; number attending schools, 141,153; average number of months of school, 9.4; number of male teachers, 546; number of female teachers, 2,101; total wages of male teachers, $310,313.76; total wages of female teachers, $675,723 06; average wages per month of males, $69.33; average wages per month of females, $36.29; total expenditures of the year, $1,748,212.95; estimated value of school property, $5,826,718: total indebtedness of the districts, $1,173,003.84, being a reduction of over $68,000 as compared with last year. The following are the statistics of the ungraded schools for the same period: Number of districts, 5,963 (the number of graded school districts was 389); number of children from 5 to 20 years, 292,509; number in school, 221,403; average term of school, 7.3 months; number of male teachers, 3,526; number of female teachers, 7,776; total wages of male teachers, $404.253.59; average per month, $27,52; total wages of female teachers, $527,693 58; average per month, $18.75; total expenditures for schools, $1,361,702.19; estimated value of school property, $3,151,126; total indebtedness of districts, $187,581.81, a decrease of $17,000 from last year.

A circular has recently been issued concerning the State Normal School at Ypsilanti, from which we glean the following: The courses of study, the methods of instruction, and the practice-teaching are arranged so as to give to each pupil a thorough professional training. The school year is divided into two terms, of twenty weeks each, the next year beginning Sept. 14. Every student, not holding an appointment from a member of the State Legislature, is required to pay $5.00 in advance as a tuition-fee for each term. Each member of the Legislature of the State is authorized, by the Board of Ed., to appoint two students from his district, who will be received, on the presentation of a certificate of appointment, free of charge. The certificate must be presented at the time of admission, or the regular fee will be required. Each appointment is good for one year only. Diplomas from the common-school course will entitle those receiving them to a certificate to teach three years in the public schools of the State without examination, and to a renewal of this certificate on condition of having passed a satisfactory examination in two studies of an advanced course, and presenting satisfactory testimonials of success in teaching and governing, signed by members of the School Board and one or two patrons of the school, not officers. Graduation from any of the higher courses entitles those holding diplomas to legal life-certificates of qualification to teach in any of the public schools of the State, not under special law.

NEW YORK.—In the case of Geo. F. W. Stuart, ex-secretary of the Board of Ed. of Brooklyn (the alleged Brooklyn defaulter), the attorney-general is represented as having said that if the Board of Ed. did not bring a suit immediately, he would have a suit brought in his own name, and authorise the corporation counsel and district attorney to prosecute it. It is intimated about City Hall that there will be some startling disclosures in the case very soon, and that in all probability some twenty-five or thirty persons will be taken into custody this week on the charge of being implicated with Stuart in the defalcation of funds. The Board of Ed. has not, as yet, taken any action in the case.

MISSOURI.—The fourteenth annual catalogue of the State Normal School, at Kirksville, shows a remarkable prosperity. Of the 500 students enrolled, 452 represent 54 Missouri counties; the others, 10 different States. During the 14 years, 4,026 students have attended. About 2,000 of these taught in the public schools of the State during the past school year. The Legislature greatly strengthened the school by adding one-third to the annual appropriation. The Regents officially state that the school is in a better condition than ever before.

NEVADA.—F. N. Stone, of Elko, will be principal of the State Univ. for the current year.

OHIO.—The *Oberlin Review*, speaking of the cost of education at Oberlin Coll., says that the class of 1881, consisting of 28 members, expended, during their college course, the sum of $29,706. One gentleman paid $1,800 for the education which another received for $600. One lady and four gentlemen have earned no part of their expenses; three ladies and fifteen gentlemen have paid their college expenses in part, while seven have paid the expenses of their entire course by their own labor.

D. R. Boyd remains at Van Wert at a largely-increased salary.

OREGON.—Henry Villiard has given the Oregon State Univ. $70,000 to relieve its indebtedness.

Higher education on the Northwest Pacific, for both young men and women, is abundantly provided for in Pacific Univ., at Forest Grove, under the presidency of Dr. Herrick, late of Massachusetts, assisted by an able faculty of seven professors and teachers. The Academic course covers three years, and the Univ. four years. The Univ. is, in character and administration, undenominational. Two years ago its trustees passed a resolution in which they "wish to recognize it as in harmony with the *original aims and plans* of the Amer. Coll. and Ed. Soc." But an express rule of that Soc. is, that any institution connected with it "must not be under the control of any presbytery, synod, association, conference, convention, or other ecclesiastical body." Pacific Univ. has a reputation for scholarship and thoroughness second to no school on the Coast. It has three well appointed courses above the preparatory, — a *classical* course for all of both sexes who desire it, a *scientific* course of three years, and a *ladies'* course, also of three years. With its endowment and prestige, it can more readily be made, by proper coöperation, what is needed, than any other institution of learning on the Pacific Slope. Its *location*, at Forest Grove,—which Prest. Hayes pronounced the "prettiest place" he had seen in the State, — not far from Portland, accessible, and soon to be more so (when the railway furnishes, as soon it must, accommodation trains), for those in this State, Washington Territory, and Idaho, who desire the *higher Christian education*.

PENNSYLVANIA.—Mr. Reuben J. Flick, of Wilkesbarre, has recently given $20,000 to Lincoln Univ.

When the late Dr. S. S. Haldeman, the distinguished Pennsylvania scholar, was in Paris, he startled a Russian savant by talking with him in all the leading European languages, and finally repeating a verse in Russian.

TEXAS.—The State has been honored in the election of Prof. Cooper to the position of an assistant professorship in the school of Latin at Yale Coll., of which he was a graduate, although a native of Texas.

Forty-six State pupils will be maintained at Prairie View Normal Inst. during the session of 1881-82; 10 students of the session of 1880-81 will be returned. The 36 vacancies will be supplied as follows: Each State senator will appoint one pupil, and the principal of the Inst. five.

Dr. A. R. Horne, principal of the Summer Normal Inst. at Tyler, has been elected president of East Texas Univ.

The constitution of the State provides that the proceeds of the sales of the public lands shall go into the school fund. There are already $2,000,000 in the treasury, and 40,000,000 acres of land remain unsold. The proceeds of this at a moderate estimate will amount to $100,000,000, an amount which, it is said, is equal to the aggregate school-funds of all the other States.

UTAH.—In the summer of 1878 a charter was granted to Salt Lake Acad. under the laws of the Territory. In the fall of that year the Acad. was opened by Prof. Edward Benner, of Colorado Coll., who had been delegated by the trustees of that institution to this work. After two years, the formal connection of the Acad. with Colorado Coll. was dissolved, the New West Ed. Commission assuming the responsibility which the Coll. had borne. Valuable beginnings have been made for a library and cabinets, which are receiving constant improvements. The purpose of the Trustees is to found an Acad. after the general plan of the higher New-England institutions of its class. The immediate aim is threefold: To prepare teachers for the destitute portions of this and neighboring Territories; to fit young men and women for creditable entrance into the foremost institutions, classical or scientific, of our country; to fit young persons for the study of a profession, or for entrance into business. The school is unsectarian. It has no official connection with any church, but is under the direction of a self-perpetuating Board of Trustees. The ethical aim of its faculty will be to encourage in the pupils a spirit of reverence toward God, and charity toward men. While a positive religious influence is exerted upon students, no effort is made to bias their church connections. A well-graded system of instruction has been organized in connection with the other work of the New West Ed. Commission. During the coming year it is expected that about twelve schools, under the Commission in different parts of the Territory, will be tributary to the Acad., sending to it their ablest and most ambitious scholars. The other schools in Salt Lake, under the management of the Trustees, will have the Acad. as their goal; so that the Acad. will have select and ambitious students, gathered upon the principle of ability and industry, competing with each other for the prizes which advanced culture may offer.

WISCONSIN.—Mrs. J. S. Herrick, of Ironton, has given the sum of $10,000 to Beloit Coll. for the erection of an astronomical observatory.

WEST VIRGINIA.—State Supt. Butcher, of Wheeling, is anxious to have a Convention of the Co. and City Supts. of Schools of this State during this fall or winter, at Wheeling, for the purpose of considering the best "ways and means" of carrying into more successful operation the many wise and generous provisions of the laws of this young and growing State for the public education of the children. He says: "The question of school supervision was ably discussed in our Legislature at its last session. It seemed to be admitted by all that *practical*, *thorough*, and *efficient* supervision was very desirable. Those who opposed the proposition to provide for supervision, charged that as it had been conducted in many parts of the State, it was simply a farce,—throwing money away! Whether this is true or not, there exists a feeling of hostility on the part of some to providing efficient plans for supervision, mostly growing out of this charge. If the charge is in any great degree true, the complaint of our law-makers is just, and it reflects credit upon them; but it becomes the very serious and important duty of the superintendents themselves to inquire into the matter, and if this or other faults exist, apply the remedies. With the view, therefore, of correcting faults if they exist; of erecting some *uniform* standard by which to judge the work of the superintendent; of defining his *duties* under our present law; and of getting information from reliable sources as to *how those duties shall be performed*, I propose a Supts.' Convention."

WASHINGTON TERRITORY.—The Univ. of Washington Territory, of which A. J. Anderson, A.M., is president, is in a very flourishing condition for so young an institution. In the Collegiate Dept. there are 27, in the Senior Preparatory, 33; total in Collegiate Depts., 60; in English and Latin Preparatory, 77; total in all departments, 137. There are four complete courses of study,—a Classical, of four years; a Scientific, of three years; and Normal and Commercial, of two years each, beyond the senior preparatory studies and the common English branches and Latin reader. One student has already finished the junior year of the Coll. or Classical course, two graduated last year from Scientific course, and both the Normal and Commercial courses sent forth graduates in 1880 and 1881. A large part of the work in the Univ. is preparing young people for teaching in the public schools.

FOREIGN.—The Congress of the British Social Science Assoc. will this year be held in Dublin, in the month of October. The following are the subjects set down for discussion in the Education Dept: (1) What alterations is it desirable to introduce into the system of national (primary) education in Ireland? (2) In what way may intermediate education be best promoted under the Act of 1878? (3) How may the higher education of women be most efficiently advanced in Ireland?

Winnipeg (Canada) seems active in educational interests, as indicated by its colleges and schools. In connection with the Univ., there are St. John's Coll., St. John's Ladies' Coll., and the Manitoba Coll., besides four large public schools,—the central, south ward, north ward, and east ward, —all of which have fine large buildings, and to one of them a large addition is being built to furnish accommodation for the increased attendance.

At present the supply of teachers in New Zealand is below the requirements of the Colony; and it is not expected that its own training-schools will, for years to come, cope with its necessities. From the report recently issued by the New Zealand Education Department, it appears that "it may reasonably be expected that well-equipped and efficiently-conducted training institutions at the four principal centers of population will eventually furnish a fair supply of properly-trained teachers.

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